

Year Book
OF
THE NATIONAL ASSOCIATION OF
COTTON MANUFACTURERS
WITH
COTTON MANUFACTURERS
Manual
1926

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WILLIAM B. MACCOLL

President, 1925-26

Year Book
of
THE NATIONAL ASSOCIATION OF
COTTON MANUFACTURERS
with
COTTON MANUFACTURERS
Manual
1926



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THE NATIONAL ASSOCIATION OF COTTON MANUFACTURERS

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TABLE OF CONTENTS

YEAR BOOK

	PAGE
FOREWORD	9
PREFACE	9
CHARTER	10
CONSTITUTION AND BY-LAWS	12-17
OFFICERS AND DIRECTORS	18

STATISTICAL

FOREWORD	21
ACKNOWLEDGMENT OF CO-OPERATION	22
RAW COTTON:	
WORLD PRODUCTION AND CONSUMPTION	23-27
SOURCE, LENGTH OF STAPLE, VARIETIES, CULTURE, ACREAGE, YIELD, AND FROST DATA	28-36
FORECASTS, CONDITION AND PRODUCTION OF UNITED STATES CROP	37-44
GINNINGS AND QUANTITY AND VALUE OF PRODUCTS	45-47
REVIEW OF LAST SEVEN AMERICAN CROPS	48-52
AREA INFESTED BY BOLL WEEVIL, DISPERSION AND DESTRUCTION BY BOLL WEEVIL	53-54
INDIAN PRODUCTION, YIELD, AND ACREAGE	55-57
SUPPLY, DISTRIBUTION, CONSUMPTION AND FOREIGN TRADE OF UNITED STATES AND WORLD	57-91
COTTON MANUFACTURES:	
UNITED STATES PRODUCTION	92-98
FOREIGN TRADE OF UNITED STATES AND GREAT BRITAIN	99-110
PRICES, SALES AND MARGINS:	
RAW COTTON, YARN, AND CLOTH	111-135
WAGES AND COST OF LIVING:	
ENGLAND, NEW BEDFORD AND FALL RIVER	136-142
COTTON TEXTILE MACHINERY:	
EXPORTS	143
COSTS:	
MILL CONSTRUCTION	144-147
SPINDLES AND LOOMS:	
ACTIVITY AND DISTRIBUTION	147-158
JAPANESE COTTON INDUSTRY:	
CAPITAL, EQUIPMENT, PRODUCTION, OPERATIVES, AND WAGES	159-161
INDIAN YARN PRODUCTION	162
RAYON:	
UNITED STATES AND WORLD, PRODUCTION AND PRICES	163-167
STATISTICAL HISTORY OF THE AMERICAN COTTON INDUSTRY	168-171
LEGAL WORKING HOURS FOR WOMEN	172
APPROXIMATE VALUE OF FOREIGN MONEY	173

TECHNICAL

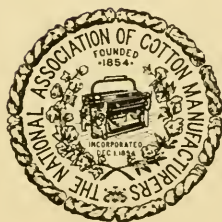
	PAGE
FOREWORD AND INTRODUCTION	175-176
ABBREVIATIONS	177
REFERENCE DATA AND CONVERSION TABLES	178-182
ELECTRICAL DEFINITIONS AND UNITS OF CAPACITY	183-184
HEAT RADIATION	185
POWER TRANSMISSION	186-193
PRODUCTION OF COTTON MACHINERY	194-195
ROVING TABLES	196-197
YARN TABLES	198-208
CLOTH TABLES	209-213
KNITTING TABLES	214-217
HUMIDITY CHARTS AND TABLES	218-222
TEST METHODS AND CORRECTION TABLES	223-241
STANDARD SIZES; DUCK, HOSIERY, BLANKETS	242-243
SALES NOTE FOR GRAY GOODS	244-245
THROWN SILK RULES FOR BUYING	246-247

MEMBERSHIP

PAST OFFICERS AND DIRECTORS	250-251
LIST OF MEMBERS	252-298

Year Book
of
THE NATIONAL ASSOCIATION OF
COTTON MANUFACTURERS

1926



FOREWORD

The Year Book of The National Association of Cotton Manufacturers furnishes in condensed form a reference work where practically all of the information on cotton statistics and technical data of interest to the cotton manufacturer can be readily obtained. Further editions can be made of greater value if the members will notify the Secretary's Office whenever they have any suggestions on the addition of material not included.

WILLIAM B. MACCOLL.
President.

PREFACE

From a small beginning in 1918 the Year Book of The National Association of Cotton Manufacturers has grown with each edition, both in scope and in practical value. It is now recognized as one of the leading authoritative sources of information on cotton production and manufacturing, and is in use in practically all of the cotton manufacturing countries of the world.

In preparing this, the ninth edition of the Year Book, the same general policies of the previous editions have been carried out. The order of arrangement has been revised in accordance with suggestions received from some of our members. The lists of members have been rearranged and condensed into one alphabetical list that gives all of the details. The Technical and Statistical sections precede the list of members instead of following it as in other editions. New material has been added and all the information from previous editions brought up to date.

The editors are indebted to the Statistical and Technical Committees of the Association and the different departments of the government for their help.

RUSSELL T. FISHER,
Secretary.

CHARTER

No. 6091

Commonwealth of Massachusetts

BE IT KNOWN that whereas, EDWARD W. THOMAS, C. J. H. WOODBURY, WILLIAM J. KENT, F. M. MESSENGER, HARRY T. WHITIN, ARTHUR H. LOWE, ALBERT F. KNIGHT, ALFRED M. GOODALE, FRED C. McDUFFIE and GEORGE W. BEAN have associated themselves with the intention of forming a corporation under the name of the NEW ENGLAND COTTON MANUFACTURERS' ASSOCIATION, for the purpose of encouraging scientific investigation and experiment as to the methods of manufacturing cotton; collecting and imparting information relating to this industry; promoting social intercourse among its members; and establishing and maintaining a library of works on textiles in the city of Boston, and have complied with the provisions of the Statutes of this Commonwealth in such case made and provided, as appears from the certificate of the President, Treasurer and Directors of said corporation, duly approved by the Commissioner of Corporations, and recorded in this office.

Now, Therefore, I, WILLIAM M. OLIN, Secretary of the Commonwealth of Massachusetts, do hereby certify that said EDWARD W. THOMAS, C. J. H. WOODBURY, WILLIAM J. KENT, F. M. MESSENGER, HARRY T. WHITIN, ARTHUR H. LOWE, ALBERT F. KNIGHT, ALFRED M. GOODALE, FRED C. McDUFFIE and GEORGE W. BEAN, their associates and successors, are legally organized and established as and are hereby made an existing corporation under the name of the

NEW ENGLAND COTTON MANUFACTURERS' ASSOCIATION,

with the powers, rights and privileges, and subject to the limitations, duties and restrictions which by law appertain thereto.

*Seal of the
Commonwealth
of
Massachusetts* Witness my official signature hereunto subscribed, and the seal of the Commonwealth of Massachusetts hereunto affixed this first day of December, in the year of our Lord one thousand eight hundred and ninety-four.

WILLIAM M. OLIN,
Secretary of the Commonwealth.

Commonwealth of Massachusetts

(Acts of 1895, Chap. 163.)

AN ACT TO AUTHORIZE THE NEW ENGLAND COTTON MANUFACTURERS' ASSOCIATION TO HOLD ITS MEETINGS WITHOUT THE COMMONWEALTH.

Be it enacted, etc., as follows:

SECTION 1. The New England Cotton Manufacturers' Association is hereby authorized to hold its meetings in any state or territory of the United States and in the District of Columbia; provided, however, that its annual meeting shall be held in this Commonwealth at least once in five years.

SECTION 2. This act shall take effect upon its passage. [Approved March 23, 1895.]

No. 252

Commonwealth of Massachusetts

BE IT KNOWN that whereas

NEW ENGLAND COTTON MANUFACTURERS' ASSOCIATION

a corporation organized under the laws of this Commonwealth and subject to the provisions of chapter one hundred and twenty-five of the Revised Laws has complied with the provisions of chapter one hundred and nine of the Revised Laws, as appears from the certified copy of the order of the Commissioner of Corporations, authorizing said corporation to change its name and adopt the name of

THE NATIONAL ASSOCIATION OF COTTON MANUFACTURERS, and the certificate of the Vice President and Acting President, Treasurer and Directors of said corporation duly filed in this office pursuant to the provisions of section ten of the aforesaid chapter one hundred and nine of the Revised Laws.

NOW, THEREFORE, I, William M. Olin, Secretary of the Commonwealth of Massachusetts, DO HEREBY CERTIFY, that the name which said corporation shall bear is

THE NATIONAL ASSOCIATION OF COTTON MANUFACTURERS, which shall hereafter be its legal name.

Seal of the Commonwealth of Massachusetts WITNESS my official signature hereunto subscribed, and the Great Seal of the Commonwealth of Massachusetts hereunto affixed this twenty-fifth day of June in the year of our Lord one thousand nine hundred and six.

WM. M. OLIN,

Secretary of the Commonwealth.

THE NATIONAL ASSOCIATION OF COTTON MANUFACTURERS

SUCCESSOR TO
NEW ENGLAND COTTON MANUFACTURERS' ASSOCIATION

FOUNDED 1854
INCORPORATED DECEMBER 1, 1894

CONSTITUTION AND BY-LAWS

(Revised, November 1, 1923)

I

NAME

The name is THE NATIONAL ASSOCIATION OF COTTON MANUFACTURERS.

II

QUALIFICATIONS OF MEMBERS

Active Members

1. Any person who is actively engaged as President, Treasurer, Agent, Superintendent, or Manager in the manufacture, printing, or finishing of cottons shall be eligible for active membership.

Associate Members

2. Any person engaged in the manufacture of cotton or cotton fabrics, or the manufacture of textile machinery, or industries kindred to the cotton manufacture, shall be eligible for associate membership.

3. This class of membership shall be entitled to attend the meetings of the Association and participate in its proceedings without the right to vote except by permission from the Board of Government or by vote of the Association.

Sustaining Members

4. Any firm or corporation actively engaged in manufacturing, bleaching, printing, or finishing of cotton, or any firm or corporation actively engaged in a business contributory to the cotton manufacturing industry, shall be eligible for sustaining membership.

5. The executive head of a firm or corporation, so elected, or any duly authorized representative thereof, shall represent its sustaining membership in the Association.

6. Sustaining members shall enjoy the full privilege of active membership and in addition shall be entitled to such direct service as the Association may be able to render by its technical and statistical or other departments under such regulations as the Board of Government may prescribe.

Honorary Members

7. Honorary members shall be recommended by the Board of Government and may be elected at any duly called meeting of the Association. They shall be entitled to attend the meetings of the Association and participate in its proceedings without the right to vote. No person actively engaged in cotton manufacture shall be eligible to such membership.

Life Members

8. Any active or associate member by the single payment of a sum equal to ten times the amount of his annual dues, shall be exempt from all future payment of dues and shall become a life member and shall have all the privileges to which his class of membership is entitled.

9. The minimum dues for a life member shall be one hundred dollars.

10. All moneys thus paid shall be invested as a permanent fund by the Treasurer, acting under the direction of the Board of Government, of which the income only shall be subject to appropriation for current expenses.

Technical Members

11. Any person over twenty-five years of age (except those designated under Article II, Sections 1 and 2) engaged in the manufacture, bleaching, printing, finishing, or distribution of cotton products; or in any industry contributory to cotton manufacture, including the manufacture and installation of cotton machinery; or who is employed in a school or college giving instruction in the manufacture of cotton goods and accessory industries; or by a technical laboratory or textile engineering organization, shall be eligible to technical membership.

Junior Technical Members

12. Any junior or senior student of a school or college giving instruction in textile manufacture, or any employee, under twenty-five years of age and not a textile school graduate, engaged in the supervision of cotton manufacture, bleaching, printing, or finishing, shall be eligible as a junior technical member. A student junior technical member upon graduation, and an employee junior technical member upon attaining his twenty-fifth birthday, shall automatically become a technical member of the Association and

shall be subject to the same conditions and receive the same privileges as other technical members.

13. It shall be the duty of all members of the Association to make returns to the Secretary of such statistics as may be called for by him, under the direction of any committee duly appointed for the collection of statistics, when not incompatible with private interests.

III

OFFICERS

1. The officers shall be a President, two Vice Presidents, fifteen Directors, a Treasurer, and a Secretary.

2. The PRESIDENT, and in his absence a VICE PRESIDENT, shall preside at all meetings of the Association and of the Board of Government.

3. The TREASURER, or a deputy whom he may appoint with the approval of the Board of Government, shall collect all moneys due the Association and disburse the same in accordance with the action of the Board of Government. He shall keep an accurate account of all receipts and expenditures and present a full account of the finances of the Association at the annual meeting in each year, or whenever called for by the Board of Government. He shall act as trustee of the permanent funds of the Association.

4. The SECRETARY shall attend all meetings of the Association and the Board of Government and keep accurate records of their doings. In the absence of the Secretary at any meeting, a Secretary pro tem may be appointed by the presiding officer, who shall be sworn to do all things, while in office, required of the Secretary.

5. Any officer who shall unreasonably absent himself from three consecutive meetings of the Board of Government of which he is a member, or shall otherwise neglect or refuse to perform the duties of his office, may be removed from office at any regular meeting of the Board of Government by a vote of a majority of the members present and voting thereon, a notice of such proposed action to be sent to him by mail at least one week previous to the meeting.

IV

BOARD OF GOVERNMENT

1. The President, Vice Presidents, and Directors, in addition to the Presidents who have held office during six years previous to the annual meeting of any year, shall constitute a BOARD OF GOVERNMENT and have under its care and direction all matters pertaining to the management of the Association.

2. Meetings of the Board may be called by the President at such time and place as he may deem expedient, giving each member a written or printed notice of the same at least five days before the day of the meeting.

3. At the first meeting of the Board after the Annual Meeting, a Treasurer, a Secretary, and an Auditor of Accounts for the year

ensuing shall be elected. The Board shall also fix the amount of the compensation of the Secretary at this meeting.

4. All vacancies in the Board, occasioned by death, resignation, or removal, shall be filled by the Board; and the persons so elected shall hold their offices until the next Annual Meeting, except as provided in Article III, Section 5.

5. At the first meeting of the Board, or as soon after as practical, the President, with its approval, shall appoint from its membership an Executive Committee of seven, which shall exercise authority in such matters as may be delegated to it by the Board. The President shall be Chairman of this Committee.

6. The President shall appoint from the general membership of the Association such other committees as in his judgment can most effectively serve its needs and interests. All committees so appointed shall report their conclusions, whenever the particular matter dealt with involves the policy of the Association or the expenditure of money, to the Board of Government.

7. The Auditor shall examine the accounts of the Treasurer annually, and report at the annual meeting his findings.

8. No committee or member thereof shall make public any matter in connection with the work of the Association without the approval of the Board of Government.

9. Seven members shall constitute a quorum for the transaction of business.

V

MEETINGS

1. The Annual Meeting of the Association shall be held the last Wednesday in October, or at such other time and at such hour and place as the Board of Government shall appoint.

2. The Board of Government shall arrange for a Semi-Annual Meeting of the Association to be held in April or at such other time and at such hour and place as the Board of Government shall appoint.

3. Special meetings shall be called by the Board of Government whenever it deems it expedient or upon written application of any fifty members to the Secretary.

4. All meetings of the members of the Association shall be in pursuance of a written or printed notice, addressed to each member, with the name of the President, or Secretary, attached thereto, and deposited in the Post Office ten days at least before the day of meeting, specifying the time and place of meeting; and at all such meetings twenty-five members shall constitute a quorum for the transaction of business.

VI

ELECTIONS

1. At each Annual Meeting there shall be chosen by ballot, a President, a first Vice President, a second Vice President, and five Directors; the President and Vice Presidents to serve one year and

the five Directors for terms of three years unless sooner removed, as hereinbefore provided.

2. No Director, elected as such, who has to his credit six years of consecutive service, shall be eligible for re-election until one year after the completion of such service.

3. The officers shall hold their respective offices until their successors shall be chosen and accept their positions.

VII

ELECTION OF MEMBERS

All nominations for membership of any class in the Association shall be made in writing and presented to the Board of Government for action thereon. Upon favorable action by the Board of Government the nominee shall become a member upon the payment, within thirty days, of the initiation fee and dues of his class.

VIII

ENTRANCE FEES, DUES AND ASSESSMENTS

1. The admission fee for active members shall be ten dollars and the payment of annual dues not exceeding ten dollars.

2. The admission fee for associate members shall be twenty-five dollars and the annual assessment shall be double the sum annually voted for active members.

3. The annual assessment for sustaining members shall be at the rate of twenty-five cents for each one thousand dollars of yearly payroll paid by such firm or corporation during the previous year in all its departments actively engaged in the manufacture of cotton goods or in contributory industries; provided that no annual assessment shall be less than fifty or more than five hundred dollars. There shall be no initiation fee for sustaining members.

4. Honorary members shall not be subject to payment of admission fees or assessments.

5. The admission fee for technical members shall be ten dollars and the annual dues five dollars.

6. Junior technical members shall pay no admission fee and the annual dues shall be three dollars.

7. Dues in the active, associate, technical, and junior technical membership classes shall be paid in advance on the first day of January of each year. The annual assessment for sustaining members is payable in advance upon the anniversary of such membership.

8. Any member failing to pay two successive assessments shall cease to be a member at the end of six months from the date when such second assessment shall become due.

IX

RESIGNATIONS

Any member may withdraw from the Association upon payment of all arrearages, first giving notice of his intention to do so, in writing, to the Secretary, and the Board of Government may accept such resignation.

X

SUSPENSION OR EXPULSION

Any member may be suspended or expelled for cause at any duly called meeting of the Board of Government by a two-thirds vote of the members present, provided he has been notified of the charges against him and an opportunity given him to appear in his defense.

XI

NATIONAL COUNCIL OF AMERICAN COTTON MANUFACTURERS

1. The Board of Government may co-operate with the American Cotton Manufacturers' Association in matters of national scope and importance through the National Council of American Cotton Manufacturers (composed of representatives of The American Cotton Manufacturers' Association and an equal number from this Association) in such manner and to such an extent as it may from time to time determine to be for the best interests of the cotton manufacturing industry, and may delegate to the Council authority to act for this Association on such matters of national importance as may be mutually agreed upon by the Boards of Government of the constituent associations.

2. The representatives of this Association in the National Council shall be the seven following: The President of the Association (ex-officio), the last three living past presidents (ex-officiis), and three others elected by the Board of Government from the sustaining membership of the Association. At the first election under this article, the Board of Government shall elect representatives to serve one, two, and three years, respectively. Thereafter one representative shall be elected each year to serve a term of three years.

3. The Board of Government, from the moneys received as dues from sustaining members, may contribute to the National Council for the support of its work at such times and in such manner as may be deemed necessary or desirable by a majority of the Board of Government.

XII

AMENDMENTS

Amendments to the Constitution and By-Laws may be made at any duly called meeting of the Association by a two-thirds vote; provided, notice of such proposed amendment be given in writing at a previous meeting, and also notice be given to each member by the Secretary, of the pendency of such amendment, ten days at least before any such meeting.

BOARD OF GOVERNMENT 1926

PRESIDENT

WILLIAM B. MacCOLL . . . PAWTUCKET, R. I.

VICE PRESIDENTS

RUSSELL H. LEONARD . . . BOSTON, MASS.

JOHN A. SWEETSER . . . BOSTON, MASS.

DIRECTORS

Term expires 1926

S. HAROLD GREENE . . . BOSTON, MASS.

ALBERT G. MASON . . . NEW BEDFORD, MASS.

W. S. PEPPERELL . . . PROVIDENCE, R. I.

DEXTER STEVENS . . . ESOMOND, R. I.

ANDREW S. WEBB . . . PHILADELPHIA, PA.

Term expires 1927

W. IRVING BULLARD . . . BOSTON, MASS.

JOHN L. BURTON . . . NEW BEDFORD, MASS.

JOHN S. LAWRENCE . . . BOSTON, MASS.

JAMES SINCLAIR . . . FALL RIVER, MASS.

E. KENT SWIFT . . . WHITINSVILLE, MASS.

Term expires 1928

C. F. BROUGHTON . . . NEW BEDFORD, MASS.

A. E. COLBY . . . BOSTON, MASS.

PHILIP DANA . . . WESTBROOK, ME.

JOHN A. PERKINS . . . COHOES, N. Y.

JAMES O. THOMPSON, JR. . . NEW BEDFORD, MASS.

FORMER PRESIDENTS EX-OFFICIO

RUSSELL B. LOWE . . . FITCHBURG, MASS.

ROBERT AMORY . . . BOSTON, MASS.

MORGAN BUTLER . . . BOSTON, MASS.

TREASURER

W. IRVING BULLARD . . . BOSTON, MASS.

SECRETARY

RUSSELL T. FISHER . . . BOSTON, MASS.

STATISTICAL — TECHNICAL
AND MEMBERSHIP

1926





STATISTICAL

FOREWORD

The Statistical Committee, in presenting this section of the Year Book, has endeavored not only to bring the statistics of The National Association of Cotton Manufacturers as they have appeared in previous years up to date, but has added further statistics in its endeavor to present to the members as complete a picture of the industry as can be given.

In 1925 the industry again passed through a most trying year, during which methods of carrying on our business were steadily being adjusted to meet new conditions not only in running our mills but in merchandising our goods.

In presenting the following statistics, the Committee hope that the members will find them useful and helpful in solving their problems during the coming year.

P. D. HOWE, *Chairman Statistical Committee*

F. S. BLANCHARD

ALSTON H. GARSIDE

ARNOLD W. HUNNEWELL

W. S. PEPPERELL

CHARLES B. NICHOLS

ALBERT GREENE DUNCAN

Acknowledgment of Co-operation

The preparation of the Statistical Section of this Year Book has been made possible by the generous co-operation of many governmental authorities in this country and abroad, and many firms and individuals in the cotton trade throughout the world. Special acknowledgment is due the Bureau of the Census and Bureau of Foreign and Domestic Commerce, especially, Textile Division, of the United States Department of Commerce; Weather Bureau, Bureau of Agricultural Economics, and Bureau of Entomology of the United States Department of Agriculture; Bureau of Labor Statistics and Women's Bureau of the United States Department of Labor; Egyptian Ministry of Agriculture; Egyptian Ministry of Finance; Indian Department of Statistics; British Board of Trade; New York Cotton Exchange; New Orleans Cotton Exchange; Liverpool Cotton Association; Manchester Cotton Association, Ltd.; Alexandria General Produce Association; New York *Daily News Record*; *Journal of Commerce*; *Textile World*; New Bedford *Standard*; *Textile Mercury*; Manchester *Guardian*; Comtelburo Ltd.'s Annual Cotton Hand Book; Shepperson's Cotton Facts; Merchants National Bank of Boston; International Federation of Master Cotton Spinners' and Manufacturers' Association; Fall River Cotton Manufacturers' Association; Japan Cotton Spinners' Association; Lockwood, Greene & Co., Inc., Boston, Mass.; Sanford & Kelley, New Bedford, Mass.; G. M. Haffards & Company, Fall River, Mass.; Frederick B. Macy & Company, New Bedford, Mass.; C. H. Pope & Company, New York, N. Y.; J. M. Prendergast & Co., Boston; The Viscose Co., New York; and Silk Association of America.

American Cotton in 1925

[Quantities in bales of lint cotton.¹]

	Exports	Domestic Consumption	Spindles Active, Thousands	Spindle-Hours Operated in Millions	Per Cent of Single-shift Capacity	RANGE OF SPOT COTTON PRICES	
						Low	High
January . . .	1,076,075	589,725	33,181	8,493	96.4	23.45	24.30
February . . .	811,838	550,132	33,277	7,868	100.0	24.25	25.35
March . . .	734,697	582,674	33,225	8,599	99.6	24.80	26.08
April . . .	472,555	597,104	33,413	8,518	100.0	24.30	24.95
May . . .	330,967	531,471	33,148	7,930	93.6	22.20	24.00
June . . .	217,786	493,765	32,310	7,690	89.0	23.35	24.85
July . . .	202,468	483,898	31,761	7,298	84.3	23.80	25.75
August . . .	312,825	448,665	31,270	6,954	80.5	22.60	25.90
September . . .	752,324	483,266	31,552	7,102	83.8	22.20	24.75
October . . .	1,421,482	543,679	32,425	7,962	89.4	19.40	23.70
November . . .	1,206,786	543,098	32,892	7,834	96.0	19.90	21.65
December . . .	984,061	575,271	33,001	7,841	99.5	19.15	21.10
<i>Year.</i>	8,523,864	6,422,748	—	—	—	19.15	26.05
1924 . . .	6,792,160	5,536,646	31,104 ²	6,696 ²	78.3 ²	22.15	35.30
1923 . . .	5,281,926	6,512,978	34,681 ²	8,688 ²	98.9 ²	22.45	37.65
1922 . . .	6,114,313	6,089,159	33,036 ²	7,723 ²	93.5 ²	16.45	26.80

¹ Except exports, which include linters.

² Monthly average.

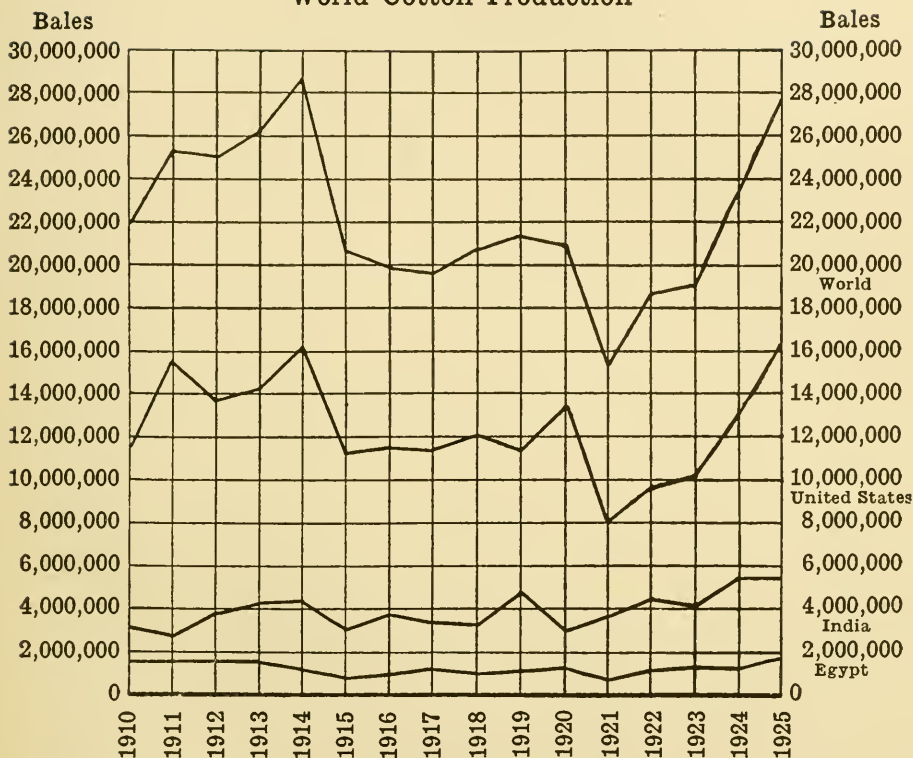
World Cotton Production and Consumption

[In bales of 478 pounds lint]

Source: United States Department of Commerce

YEAR	World Production (Bales)	CONSUMPTION			PER CENT OF WORLD TOTAL CONSUMED BY —		
		World (Bales)	European (Bales)	United States (Bales)	Europe	United States	Other Countries
1909-10	16,988,000	19,164,000	10,295,000	4,530,000	54	24	22
1910-11	18,856,000	19,888,000	11,040,000	4,408,000	56	22	22
1911-12	22,247,000	21,534,000	11,998,000	5,026,000	56	23	21
1912-13	21,550,000	22,055,000	12,158,000	5,575,000	55	25	20
1913-14	22,612,000	22,198,000	12,029,000	5,465,000	54	25	21
1914-15	24,861,000	20,670,000	10,606,000	5,485,000	51	26	25
1915-16	18,461,000	21,978,000	10,878,000	6,270,000	50	28	22
1916-17	18,924,000	21,108,000	9,044,000	6,653,000	43	32	25
1917-18	18,141,000	18,515,000	6,621,000	6,435,000	36	35	29
1918-19	18,765,000	16,704,000	5,962,000	5,831,000	36	35	29
1919-20	20,220,000	19,300,000	7,700,000	6,485,000	40	34	26
1920-21	19,665,000	16,905,000	6,735,000	4,905,000	40	29	31
1921-22	15,334,000	19,990,000	7,916,000	5,910,000	39	30	31
1922-23	17,959,000	21,325,000	8,129,000	6,666,000	38	31	31
1923-24	19,005,000	19,982,000	8,393,000	5,681,000	42	28	30
1924-25	23,285,000	22,640,000	9,689,000	6,191,000	43	27	30

World Cotton Production



The above chart is based on the table on the following page.

World Production of Cotton

[In bales of 478 pounds net]

Source: United States Department of Agriculture

YEAR	United States	India ¹	Russia	Egypt	China ²	Brazil	Mexico	Peru	All Other Countries	Total
1910	11,609,000	3,254,000	1,006,000	1,555,000	3,467,000 ³	297,000 ³	200,000	88,000 ³	439,000	21,915,000
1911	15,693,000	2,730,000	969,000	1,530,000	3,437,000 ³	300,000 ³	160,000	96,000 ³	441,000	25,356,000
1912	13,703,000	3,702,000	946,000	1,554,000	3,931,000 ³	348,000 ³	240,000	112,000	507,000	25,043,000
1913	14,156,000	4,239,000	1,026,000	1,588,000	4,000,000 ³	397,000 ³	205,000	133,000	515,000	26,259,000
1914	16,135,000	4,359,000	1,270,000	1,337,000	4,500,000	387,000 ³	108,000	129,000	462,000	28,687,000
1915	11,192,000	3,128,000	1,512,000	989,000	3,000,000 ³	282,000	95,000	113,000	378,000	20,689,000
1916	11,450,000	3,759,000	1,199,000	1,048,000	1,534,000	281,000	103,000	127,000	344,000	19,845,000
1917	11,302,000	3,393,000	634,000	1,304,000	2,092,000	345,000	135,000	125,000	345,000	19,675,000
1918	12,041,000	3,328,000	161,000	999,000	3,053,000	339,000	203,000	142,000	347,000	20,613,000
1919	11,421,000	4,853,000	81,000	1,155,000	2,599,000	506,000	199,000	155,000	415,000	21,384,000
1920	13,440,000	3,013,000	58,000	1,251,000	1,883,000	370,000	188,000	164,000	508,000	20,875,000
1921	7,954,000	3,748,000	43,000	902,000	1,517,000	505,000	147,000	157,000	357,000	15,330,000
1922	9,762,000	4,348,000	55,000	1,170,000	2,048,000	553,000	178,000	137,000	454,000	18,705,000
1923	10,139,671	4,247,000	321,000	1,213,000	1,992,000	576,000	136,000	203,000	655,329	19,500,000
1924	13,627,936	5,069,000	397,000	1,276,000	2,176,000	605,000	298,000	206,000	469,000	23,900,000
1925 ⁴	16,085,905	5,064,000	853,000	1,629,000	2,114,000	⁵	215,000	⁵	⁵	27,800,000

¹ Total Indian production.² Estimates which include production in the most important provinces where the commercial crop is grown.³ Unofficial.⁴ Advance estimates subject to correction.⁵ Not available.

Source of Supply of Cotton according to Length of Staple

[Bales of 500 pounds; gross weight]

Source: British Cotton Growing Committee and United States Bureau of Markets

GROWTHS	Kind	Where Grown	Length of Staple (Inches)	Approximate Pre-war Supply (Bales)
I {	Sea Island	Islands, South Carolina	1½-2¼	8,000
	Sea Island	West Indies	1½-2¼	4,000
	Sea Island	Islands, Florida and Georgia	1½-1¾	70,000
II {	Sea Island	West Indies	1½-1¾	2,000
	Egyptian	Egypt	1½-1¾	550,000
	Egyptian	Egypt	1-1½	700,000
III {	Egyptian	Sudan	1-1½	20,000
	African	Mississippi Delta, etc.	1½-1½	200,000
	African	Nyasaland, Uganda, and East and South Africa	1½-1¾	40,000
	Peruvian	Peru	1-1½	125,000
	American ¹	United States	¾-1¾	15,000,000
	Mexican	Mexico	¾-1½	150,000
	Brazilian	Brazil	¾-1½	300,000
	Russian	Russia	1-1½	500,000
	West African	West Africa	1-1½	15,000
IV {	Levant	Levant	¾-1½	100,000
	Indian	India	1-1½	400,000
	Chinese and Korean	China and Chosen (Korea)	1-1½	250,000
V {	Indian	India	¾-1½	4,500,000
	Russian	Russia	¾-1½	750,000
	Chinese	China	¾-1½	1,800,000
	Approximate world's pre-war supply			25,484,000

¹ Including American-Egyptian cotton.

Length¹ of Staple of the World's Cotton by Varieties

[In inches]

Source: United States Department of Agriculture

VARIETY	Minimum	Average	Maximum	VARIETY	Minimum	Average	Maximum
United States:				India:			
Sea Island	1 $\frac{1}{8}$	—	2 $\frac{1}{8}$	Cambodia	—	—	1 $\frac{1}{8}$
Meade	1 $\frac{3}{8}$	—	1 $\frac{3}{4}$	Karunganni	—	—	1
American-Egyptian	1 $\frac{1}{2}$	—	1 $\frac{3}{4}$	Broach	—	—	1
Upland long staple	1 $\frac{1}{8}$	—	1 $\frac{3}{4}$	Oomras	—	—	—
Upland short staple	—	—	1 $\frac{1}{16}$	Dholleras	—	—	—
Mexico	—	1	—	Kumtias	—	—	—
Egypt:				Western and Northern	—	—	—
Sakels	1 $\frac{3}{8}$	—	1 $\frac{5}{8}$	Timnevellys	—	—	—
Brown and uppers	1 $\frac{1}{8}$	—	1 $\frac{3}{8}$	Bengals	—	—	—
China:				Sind-Punjab	—	—	—
Native	—	—	—	Brazil:	—	—	—
American	—	—	—	Serido or Mocó	—	—	—
Russia:				Verdão	—	—	—
Native	—	—	—	Inteiro	—	—	—
American	—	—	—	Quebradinho	—	—	—
Peru:				Macaco or Garga	—	—	—
Full rough (aspero)	—	1 $\frac{1}{4}$	—	Cleveland	—	—	—
Semi-rough (semi-aspero)	—	1 $\frac{1}{8}$	—	Russel Big Boll	—	—	—
Egipto (suave)	1 $\frac{1}{16}$	—	1 $\frac{1}{8}$	Express	—	—	—
Tanguis	—	1 $\frac{5}{16}$	1 $\frac{1}{2}$	Webber	—	—	—
Mitafi	—	1 $\frac{1}{4}$	—	Herbaceo	—	—	—
				Durango	—	—	—
				Sea Island	—	1 $\frac{1}{4}$	—
				Campo Brito	—	1 $\frac{8}{16}$	—

¹ Figures are only approximate. It must be noted that opinions frequently differ as to length of certain varieties.

Approximate Dates of Cotton Planting and Picking by Countries

Source: United States Department of Agriculture

COUNTRY	PLANTING			PICKING		
	Beginning	Principal Months	End	Begin-ning	Principal Months	End
United States ¹	March 15	—	May 25	July 1	—	Dec. 31
Mexico:						
Laguna District	—	—	March	July	—	Dec.
Lower California	March	—	July	Sept.	—	Feb.
Egypt	Feb.	—	May	Aug.	—	Dec.
China	May	—	—	Oct.	—	—
Russia	—	March-April	—	Aug.	—	Oct.
India	—	March-Dec.	—	—	Oct.-April	—
Brazil:						
North	Dec.	—	April	Aug.	—	Dec.
South	Sept.	—	Nov.	March	—	May
Peru ²	—	Oct.-Dec.	—	—	May-Sept.	—

¹ About 95 per cent of the crop is picked from August 1 to November 30.

² Planting and picking are carried on all the year. Some varieties yield several crops before they are replanted.

Usual Dates to begin Planting and Picking in the United States

STATE	Planting	Picking
Alabama	Mar. 21 to Apr. 11	Aug. 21 to Sept. 1
Arkansas	Apr. 11 to Apr. 21	Sept. 1 to Sept. 11
Georgia	Mar. 21 to Apr. 11	Aug. 21 to Sept. 1
Louisiana	Mar. 21 to Apr. 11	Aug. 21 to Sept. 1
Mississippi	Mar. 21 to Apr. 30	Aug. 21 to Sept. 1
North Carolina	Apr. 11 to Apr. 21	Sept. 1 to Sept. 11
Oklahoma	Apr. 1 to Apr. 21	Aug. 28 to Sept. 5
South Carolina	Apr. 1 to Apr. 11	Aug. 21 to Sept. 1
Tennessee	Apr. 11 to Apr. 21	Sept. 1 to Sept. 11
Texas	Mar. 1 to Apr. 21	July 1 to Sept. 1

Average Gross Weights of Cotton Bales

Variety	Pounds
Egyptian	733
Chinese	460
East Indian	400
African	402
West Indian	424
Brazilian	370
Peruvian	356
American, Sea Island	374
American, Upland	498
North Carolina	483
South Carolina	480
Georgia	478
Alabama	493
Mississippi	497
Louisiana	490
Texas	516
Arkansas	505
Tennessee	507

Estimated Cotton Production of Minor Producing Areas

[In bales of 478 pounds net]

Source: Bureau of Foreign and Domestic Commerce

	1922-23	1923-24	1924-25
Guatemala	646	825	2,100
Salvador	—	1,000	10,000
Colombia	5,000	5,000	8,000
Venezuela	10,000	10,000	15,000
Ecuador	8,000	10,000	11,500
Paraguay	4,000	16,000	12,200
Argentina	25,000	47,000	69,000
Haiti	15,000	15,000	16,000
Other West Indies	5,180	6,200	4,000
Greece	13,000	10,000	11,000
Malta	161	98	480
Cyprus	1,276	1,674	2,660
Jugoslavia	858	669	418
Bulgaria	3,600	1,800	2,960
Italy	4,600	5,000	4,520
Japan	4,000	4,000	3,000
Korea	103,000	111,000	121,000
French Indo-China	10,000	10,000	10,000
Siam	3,000	5,000	2,900
Afghanistan	5,000	5,000	5,000
Persia	10,000	40,000	60,000
Turkey	50,000	60,000	110,000
Dutch East Indies	10,000	8,000	8,000
New Hebrides	3,000	1,830	2,000
Australia	10,000	25,000	8,790
Fiji, etc.	200	79	80
Uganda	75,000	94,000	140,000
Tanganyika	6,004	8,400	15,700
Nigeria	13,000	18,000	24,000
British South Africa	3,138	5,020	7,300
Rhodesia	1,273	1,000	1,650
Sudan	21,000	41,000	45,000
French Africa	1,945	2,445	3,000
Belgian Congo	4,600	4,600	16,000
Togoland	4,600	4,600	5,000
Nyasaland	4,601	5,440	2,400
Mozambique	1,000	12,000	5,000
Algeria	272	795	2,238
Ivory Coast	100	100	100
Eritrea	692	1,381	2,760
Italian Somaliland	1,192	1,757	2,301
Gold Coast	50	837	800
Angola	2,000	2,000	2,000
Kenya	460	1,600	1,600
Total	444,175	605,150	777,457

Cotton Acreage and Yield per Acre of Egypt, India and the United States

United States Bureau of the Census and Department of Agriculture

YEAR	EGYPT		INDIA		UNITED STATES	
	Acres	Pounds	Acres	Pounds	Acres	Pounds
1902	1,324,000	437	16,581,046	90	27,175,000	187
1903	1,383,000	466	18,025,000	79	27,052,000	174
1904	1,491,000	420	19,918,000	77	31,215,000	206
1905	1,626,000	363	20,401,000	83	27,110,000	187
1906	1,564,000	440	22,488,000	87	31,374,000	202
1907	1,664,000	431	21,630,000	58	29,660,000	179
1908	1,703,000	393	19,999,000	74	32,444,000	195
1909	1,619,000	309	20,545,000	92	32,044,000	154
1910	1,664,000	453	22,596,000	68	32,403,000	171
1911	1,776,000	412	21,615,000	61	36,045,000	208
1912	1,787,000	417	22,028,000	84	34,283,000	191
1913	1,789,000	425	25,020,000	81	37,089,000	182
1914	1,823,000	353	24,595,000	85	36,832,000	209
1915	1,231,000	387	17,746,000	84	31,412,000	170
1916	1,718,000	295	21,745,000	83	34,985,000	157
1917	1,741,000	359	25,188,000	64	33,841,000	160
1918	1,366,000	338	21,038,000	76	36,008,000	160
1919	1,633,000	399	23,353,000	99	33,566,000	161
1920	1,897,000	336	21,341,000	68	35,878,000	178
1921	1,341,000	329	18,451,000	97	30,509,000	125
1922	1,868,000	360	21,077,000	98	33,036,000	142
1923	1,856,000	354	23,088,000	88	41,360,000	130
1924	1,856,000	329	24,833,000	98	40,115,000	157
1925	1,998,000 ¹	390 ¹	26,305,000 ¹	85 ¹	45,945,000 ¹	165 ¹

¹ Advance estimates.

Acreage planted to Egyptian Cotton, by Varieties

[Expressed in feddans¹]

Source: Egyptian Ministry of Agriculture

	1920	1921	1922	1923	1924	1925
Sakellaridis	1,270,481	995,479	1,357,197	1,162,036	872,624	1,128,946
Ashmouni (Uppers)	283,906	170,514	276,193	287,171	2796,362	270,842
Mitaffi	44,068	6,771	8,178	5,599	—	—
Nubari	37,320	8,645	11,084	9,862	—	—
Affi Assil	30,051	5,839	7,878	7,246	22,271	8,384
Abassi	4,293	1,267	2,274	1,772	3—	3—
Joanovich	2,087	300	335	4,082	3—	3—
Pilion	—	—	3—	3—	49,960	72,799
Various	169,870	103,063	136,704	110,332	46,626	443,411
Total	1,827,870	1,291,878	1,799,843	1,588,100	1,787,843	1,924,382

¹ 1 feddan = 1.038 acres.

² Including Zagoura, which has previously been included in "Various."

³ Included in "Various."

Acreage of Cotton planted, Acreage abandoned, and Acreage harvested in the United States

Source: United States Department of Agriculture

YEAR	Acreage planted ¹	Acreage abandoned	Acreage harvested
1912	34,766,000	483,000	34,283,000
1913	37,458,000	369,000	37,089,000
1914	37,406,000	574,000	36,832,000
1915	32,107,000	695,000	31,412,000
1916	36,052,000	1,067,000	34,985,000
1917	34,925,000	1,084,000	33,841,000
1918	37,207,000	1,199,000	36,008,000
1919	35,133,000	1,567,000	33,566,000
1920	37,043,000	1,165,000	35,878,000
1921	31,678,000	1,169,000	30,509,000
1922	34,016,000	980,000	33,036,000
1923	38,701,000	867,000	37,123,000
1924	41,390,000	1,275,000	41,360,000
1925 ²	46,448,000	2,137,000	45,945,000

¹ Acreage planted is computed as of June 25 each year.

² 1925 figures are subject to revision.

Acreage of Cotton harvested in the United States

Source: United States Department of Agriculture

STATE	THOUSANDS OF ACRES							
	1918	1919	1920	1921	1922	1923	1924	1925 ¹
Total	36,008	33,566	35,878	30,509	33,036	37,123	41,360	45,945
Alabama	2,570	2,791	2,858	2,235	2,771	3,079	3,055	3,545
Arizona	95	107	230	90	101	127	180	157
Arkansas	2,991	2,725	2,980	2,382	2,799	3,026	3,094	3,790
California ²	173	185	275	140	202	233	317	322
Florida	167	103	100	65	118	147	80	106
Georgia	5,341	5,220	4,900	4,172	3,418	3,421	3,046	3,588
Louisiana	1,683	1,527	1,470	1,168	1,140	1,405	1,616	1,854
Mississippi	3,138	2,848	2,950	2,628	3,014	3,170	2,981	3,481
Missouri	148	125	136	103	198	355	493	487
New Mexico	—	—	—	—	—	60	101	101
North Carolina	1,600	1,490	1,587	1,403	1,625	1,679	2,005	2,039
Oklahoma	2,998	2,424	2,749	2,206	2,915	3,197	3,861	5,183
South Carolina	3,001	2,835	2,964	2,571	1,912	1,965	2,404	2,746
Tennessee	902	758	840	634	985	1,172	996	1,183
Texas	11,233	10,476	11,898	10,745	11,874	14,150	17,175	17,369
Virginia	44	42	42	34	55	74	102	96
All other	12	10	24	18	44	73	41	48

¹ Preliminary estimate.

² Lower California (150,000 acres in 1925; 140,000 in 1924; 148,000 in 1923; 135,000 in 1922; 85,000 in 1921; 125,000 in 1920; 100,000 in 1919; and 88,000 in 1918) included in California figures, but excluded from United States totals.

Acreage and Production of Cotton in Egypt

Source: Egyptian Ministry of Finance

YEAR	Acreage in Feddans ¹	Acreage in Acres	Crop in Kantars Gross Weight ²	Crop in Equivalent 500-Pound Bales	Yield in Kantars per Feddan	Yield in Pounds per Acre
1911 . . .	1,711,241	1,776,000	7,386,000	1,463,000	4.32	412
1912 . . .	1,721,817	1,787,000	7,499,000	1,492,000	4.35	417
1913 . . .	1,723,094	1,789,000	7,664,000	1,522,000	4.44	425
1914 . . .	1,755,270	1,823,000	6,451,000	1,286,000	3.67	353
1915 . . .	1,186,004	1,231,000	4,775,000	952,000	4.03	387
1916 . . .	1,655,512	1,718,000	5,060,000	1,012,000	3.06	295
1917 . . .	1,677,810	1,741,000	6,293,000	1,249,000	3.75	359
1918 . . .	1,315,572	1,366,000	4,821,000	955,000	3.66	338
1919 . . .	1,573,662	1,633,000	5,572,000	1,248,000	3.54	399
1920 . . .	1,827,870	1,897,000	6,036,000	1,231,000	3.30	336
1921 . . .	1,291,878	1,341,000	4,353,000	862,000	3.37	329
1922 . . .	1,799,843	1,868,000	6,713,000	1,119,000	3.73	360
1923 . . .	1,588,100	1,648,000	5,844,000	1,160,000	3.68	351
1924 . . .	1,787,843	1,855,781	6,379,862	1,321,972	3.56	340
1925 ³ . . .	1,924,382 ³	1,988,000 ³	7,860,000 ³	1,629,000 ³	4.08 ³	390 ³

¹ 1 feddan = 1.038 acres.

² 1 kantar = 99.049 pounds.

³ Preliminary estimates.

Acreage and Crops of American-Egyptian Cotton

[Crops in 500-pound bales gross]

Source: United States Department of Agriculture

YEAR	Acreage planted	Crop
1912	520	375
1913	3,500	2,135
1914	12,000	6,187
1915	2,330	1,095
1916	5,477	3,331
1917	33,000	15,966
1918	80,000	36,187
1919	90,000	40,437
1920	240,000	91,965
1921	80,000	37,094
1922	77,000	32,824
1923	40,000	22,426
1924	8,000	4,319
1925	40,000	20,053

Dates of Earliest Killing Frosts in Autumn in the Cotton Belt of the United States during the Past Six Years

Source: United States Weather Bureau

	1920	1921	1922	1923	1924	1925
North Carolina:						
Charlotte .	Oct. 30	Nov. 13	Nov. 23	Nov. 9	Nov. 19	Oct. 29
Rockingham .	Oct. 30	Oct. 14	Nov. 11	Nov. 2 ¹	Oct. 24	Oct. 11 ¹
Raleigh .	Nov. 13	Nov. 13	Nov. 22	Nov. 2	Nov. 18	Oct. 29
Goldsboro .	Oct. 30	Oct. 14 ¹	Nov. 11 ¹	Nov. 9 ¹	Nov. 18 ¹	Oct. 11 ¹
South Carolina:						
Charleston .	Dec. 29	None	Nov. 29	Nov. 10	Nov. 30	Nov. 24
Columbia .	Nov. 13	Dec. 30	Nov. 22	Nov. 9	Nov. 19	Nov. 24
Georgia:						
Atlanta .	Nov. 13	Nov. 11	Nov. 21	Nov. 9	Nov. 25	Oct. 29
Augusta .	Nov. 14	Nov. 13	Nov. 22	Nov. 10	Nov. 19	Nov. 24
Savannah .	Dec. 25	None	Nov. 29	Nov. 10	Nov. 30	Nov. 24
Columbus .	Oct. 30	Nov. 13	Nov. 29	Nov. 10	Nov. 26	Nov. 17
Rome .	Oct. 30	Nov. 11	Nov. 10	Nov. 8	Nov. 19 ¹	Oct. 29
Alabama:						
Eufaula .	Nov. 17	Nov. 13	Nov. 29	Nov. 10	Nov. 26	Nov. 17
Mobile .	Nov. 17	None	None	Jan. 6 ²	Nov. 26	Dec. 23
Montgomery .	Nov. 17	Dec. 5	Nov. 29	Dec. 7	Nov. 26	Nov. 23
Mississippi:						
Vicksburg .	Nov. 13	Dec. 18	Dec. 19	Nov. 30	Nov. 25	Nov. 23
Greenville .	Nov. 12	Nov. 3	Nov. 26	Nov. 7	Oct. 24	Oct. 20 ¹
Louisiana:						
New Orleans .	None	None	None	Jan. 6 ²	Dec. 26	Dec. 28
Shreveport .	Nov. 13	Nov. 10	Nov. 21	Dec. 6	Nov. 25	Nov. 23
Texas:						
Galveston .	None	None	None	Jan. 7 ²	Dec. 19	Dec. 23
Palestine .	Nov. 16	Dec. 18	Dec. 19	Dec. 14	Dec. 10	Nov. 23
San Antonio .	Nov. 16	Dec. 9	None	Jan. 1 ²	Dec. 19	Nov. 16
Fort Worth .	Nov. 12	Nov. 19	Dec. 10	Dec. 14	Dec. 9	Oct. 28
Arkansas:						
Little Rock .	Nov. 12	Nov. 12	Nov. 26	Nov. 30	Nov. 25	Oct. 30
Fort Smith .	Nov. 3	Nov. 10	Nov. 26	Nov. 29	Nov. 24	Oct. 28
Tennessee:						
Memphis .	Nov. 12	Nov. 12	Nov. 16	Oct. 31	Nov. 29	Oct. 29
Nashville .	Oct. 29	Nov. 3	Nov. 21	Nov. 1	Oct. 24	Oct. 20
Chattanooga .	Nov. 15	Nov. 11	Nov. 21	Nov. 9	Nov. 20	Oct. 29
Oklahoma:						
Ardmore .	Nov. 12	Nov. 10	Nov. 20	Nov. 30 ¹	Nov. 24	Oct. 25
Oklahoma .	Nov. 11	Nov. 10	Nov. 14	Oct. 31	Nov. 24	Oct. 25
Mangum .	Nov. 2	Nov. 10	Nov. 13	Nov. 6 ¹	Nov. 7 ¹	No record

¹ First date with temperature of 32° or below.

² 1924.

Dates of Earliest Killing Frosts in Autumn, and Latest Killing Frosts in Spring, from Beginning of Record kept by United States Weather Bureau to December 31, 1925

	Years recorded	Earliest Date in Autumn	Average Date in Autumn	Latest Date in Spring	Average Date in Spring
Virginia:					
Newport News	26	Oct. 3	Nov. 6	April 26	March 28
Norfolk	53	Oct. 11	Nov. 17	April 26	March 25
Richmond	28	Oct. 12	Oct. 31	April 26	April 7
North Carolina:					
Greensboro	22	Oct. 11	Oct. 30	April 26	April 9
Raleigh	39	Oct. 8	Nov. 5	April 26	March 29
Wilmington	55	Oct. 16	Nov. 13	May 1	March 23
Charlotte	47	Oct. 8	Nov. 5	April 26	March 28
Monroe	29	Oct. 2	Oct. 19	May 10	April 14
South Carolina:					
Charleston	55	Nov. 8	Dec. 10	April 2	Feb. 20
Columbia	46	Oct. 30	Nov. 18	April 17	March 18
Greenwood	28	Oct. 11	Nov. 8	April 17	March 25
Spartanburg	35	Sept. 24	Nov. 1	April 17	March 30
Greenville	30	Oct. 10	Nov. 2	April 24	April 3
Georgia:					
Macon	26	Oct. 11	Nov. 7	April 18	March 23
Athens	32	Oct. 11	Nov. 1	April 21	April 2
Augusta	52	Oct. 21	Nov. 10	April 17	March 22
Savannah	53	Oct. 25	Nov. 24	April 13	Feb. 26
Rome	34	Oct. 11	Oct. 27	April 24	April 9
Columbus	29	Oct. 11	Nov. 6	April 26	March 22
Gainesville	29	Oct. 11	Oct. 27	April 24	April 9
Newnan	29	Oct. 11	Nov. 5	April 26	April 5
Thomasville	31	Oct. 21	Nov. 15	April 26	March 14
Florida:					
Gainesville	28	Nov. 10	Dec. 3	April 2	Feb. 26
Jacksonville	70	Nov. 12	Dec. 6	April 10	Feb. 16
Lake City	33	Oct. 25	Nov. 28	April 26	March 10
Pensacola	46	Oct. 27	Dec. 7	April 6	Feb. 17
Tallahassee	35	Nov. 4	Dec. 1	April 10	March 4
Tampa	36	Nov. 21	Jan. 3	April 7	Jan. 26
Alabama:					
Anniston	21	Oct. 11	Nov. 1	April 25	March 24
Opelika	31	Oct. 21	Nov. 11	April 17	March 20
Montgomery	54	Oct. 21	Nov. 11	April 5	March 10
Selma	28	Oct. 13	Nov. 10	April 26	March 16
Eufaula	34	Oct. 21	Nov. 12	April 26	March 16
Mobile	55	Oct. 31	Dec. 5	April 6	Feb. 17
Decatur	30	Oct. 11	Nov. 2	April 26	March 28
Birmingham	31	Oct. 21	Nov. 9	April 17	March 16
Tuscaloosa	37	Oct. 21	Nov. 6	April 25	March 27
Thomasville	28	Oct. 20	Nov. 10	April 26	March 17
Mississippi:					
Yazoo City	31	Oct. 13	Nov. 2	April 25	March 20
Vicksburg	55	Oct. 20	Nov. 12	April 6	March 4
Meridian	36	Oct. 8	Nov. 5	April 25	March 18
Natchez	31	Oct. 20	Nov. 14	April 25	March 14

Dates of Earliest Killing Frosts in Autumn and Latest Killing Frosts in Spring, and Average Dates, etc. — (Concluded)

	Years recorded	Earliest Date in Autumn	Average Date in Autumn	Latest Date in Spring	Average Date in Spring
Mississippi (Continued):					
Greenville	35	Oct. 10	Nov. 6	April 26	March 19
Greenwood	26	Oct. 13	Oct. 31	April 26	March 25
Columbus	31	Oct. 11	Oct. 31	April 26	March 27
Louisiana:					
Baton Rouge	39	Oct. 14	Nov. 18	April 5	Feb. 20
New Orleans	53	Nov. 11	Dec. 16	March 27	Jan. 25
Monroe	32	Oct. 10	Nov. 10	April 9	March 11
Natchez (see Mississippi)					
Shreveport	53	Oct. 20	Nov. 10	April 9	March 6
Vicksburg (see Mississippi)					
Texas:					
Houston	35	Oct. 25	Dec. 1	March 26	Feb. 19
Galveston	54	Nov. 16	Dec. 26	March 1	Jan. 19
Corpus Christi	39	Nov. 29	Dec. 28	March 19	Jan. 21
Luling	34	Oct. 27	Nov. 21	April 9	March 6
Cuero	33	Oct. 27	Nov. 23	April 5	Feb. 27
San Antonio	40	Oct. 30	Nov. 28	April 5	Feb. 24
El Paso	38	Oct. 27	Nov. 15	April 26	March 14
Abilene	40	Oct. 19	Nov. 10	April 23	March 21
Amarillo	34	Sept. 22	Oct. 29	May 23	April 17
Fort Worth	31	Oct. 22	Nov. 12	April 9	March 11
Lampasas	33	Oct. 9	Nov. 9	May 2	March 22
Taylor	31	Oct. 30	Nov. 22	April 5	March 13
Temple	34	Oct. 29	Nov. 18	April 9	March 10
Austin	55	Oct. 28	Nov. 22	April 9	March 5
Waco	35	Oct. 22	Nov. 12	April 9	March 12
Gainesville	35	Oct. 9	Nov. 6	May 1	March 28
Dallas	36	Oct. 8	Nov. 13	May 1	March 19
Waxahachie	27	Oct. 9	Nov. 7	April 30	March 27
Corsicana	35	Oct. 22	Nov. 14	May 1	March 15
Palestine	43	Oct. 20	Nov. 13	April 5	March 13
Nacogdoches	25	Oct. 21	Nov. 12	April 25	March 18
Greenville	24	Oct. 19	Nov. 12	April 26	March 19
Paris	33	Oct. 9	Nov. 11	April 17	March 19
Arkansas:					
Fort Smith	44	Oct. 9	Nov. 5	April 17	March 21
Little Rock	46	Oct. 22	Nov. 13	April 26	March 18
Pine Bluff	32	Oct. 11	Nov. 4	April 25	March 24
Texarkana	33	Oct. 9	Nov. 9	April 17	March 20
Tennessee:					
Memphis	54	Oct. 2	Nov. 3	April 25	March 22
Nashville	55	Oct. 8	Oct. 27	April 24	April 2
Chattanooga	47	Sept. 30	Oct. 26	May 14	April 2
Decatur	29	Oct. 2	Oct. 23	May 14	April 18
Knoxville	55	Oct. 1	Oct. 28	April 26	April 2
Oklahoma:					
Muskogee	24	Oct. 10	Nov. 3	April 21	March 22
Oklahoma	35	Oct. 7	Nov. 2	April 30	March 31
Missouri:					
St. Louis	53	Sept. 30	Oct. 27	May 22	April 4

Forecasts of American Cotton Crops by United States Department of Agriculture compared with Actual Yield and Production

Forecasts of Yield per Acre

Year	FORECASTS OF YIELD PER ACRE (POUNDS)						Actual Yield (Pounds)	PERCENTAGE OF VARIATION OF FORECASTS FROM ACTUAL YIELD					
	May 25	June 25	July 25	Aug. 25	Sept. 25	Dec. Est.		May 25	June 25	July 25	Aug. 25	Sept. 25	Dec. Est.
1925 ¹ .	—	147.7	140.0	144.1	143.5	162.3	—	—	—	—	—	—	—
1924.	—	143.8	141.3	153.5	149.2	156.8	130.6	—	—	—	—	—	—
1923.	—	142.6	143.9	134.8	137.7	128	141.5	—	—	—	—	—	—
1922.	—	151	137	145	139	141.6	124.5	—	—	—	—	—	—
1921.	—	152.2	148	127	118	126.9	178.4	—	—	—	—	—	—
1920.	—	155.9	170.4	174.0	165.0	170.8	161.5	—	—	—	—	—	—
1919.	171.3	156.8	159.8	159.8	158.0	158.2	169.6	+6	+6	—	—	—	—
1918.	—	199.8	177.3	145.2	154.1	155.9	169.6	—	—	—	—	—	—
1917.	162.5	166.9	166.9	174.6	168.3	157.7	169.6	+2	+2	+13	+9	+5	—
1916.	181.5	191.6	173.4	158.5	156.3	156.3	170.3	+16	+16	+11	+1	—	—
1915.	—	—	—	—	168.1	172.5	209.2	—	—	—	—	—	—
1914.	—	—	—	—	—	207.9	182.0	—	—	—	—	—	—
1913.	—	—	—	—	—	183.4	—	—	—	—	—	—	—

¹ 1925 reports were dated June 25, July 16, August 16, September 16 and December 8.² First forecast of yield per acre issued as of Sept. 25, 1915.

Forecasts of Total Crop

[500-pound gross bales, exclusive of linters]

Year	FORECASTS OF CROPS						Actual Production	AMOUNT OF VARIATION OF FORECASTS FROM ACTUAL PRODUCTION					
	June 25	July 25	Aug. 25	Sept. 25	Dec. Est.			June 25	July 25	Aug. 25	Sept. 25	Dec. Est.	
1925 ¹ .	14,339,000	13,588,000	13,990,000	13,931,000	15,603,000	16,103,586 ²	16,103,586	—1,764,586	—2,515,586	—2,013,586	—2,172,586	—500,586	
1924.	12,144,000	11,934,000	12,956,000	12,596,000	13,153,000	13,639,399	13,639,399	—1,705,399	—1,705,399	—683,399	—1,043,399	—483,399	
1923.	11,412,000	11,516,000	10,788,000	10,815,000	10,961,000	10,139,671	10,139,671	+1,275,329	+1,376,329	+648,329	+875,329	—58,671	
1922.	11,065,000	11,449,000	10,575,000	10,135,000	9,964,000	9,762,069	9,762,069	+1,302,931	+1,686,931	+812,931	+372,931	+191,931	
1921.	8,433,000	8,203,000	7,037,000	6,537,000	8,340,000	7,953,641	7,953,641	+479,359	+249,359	—916,641	—1,416,641	+386,359	
1920.	11,450,000	12,519,000	12,783,000	12,123,000	12,987,000	13,439,603	13,439,603	—1,989,603	—920,603	—656,603	—1,316,603	—452,603	
1919.	10,986,000	11,016,000	11,230,000	10,696,000	11,030,000	11,420,763	11,420,763	—434,763	—1,404,763	—190,763	—724,763	—390,763	
1918.	15,323,000	13,619,000	11,137,000	11,818,000	11,700,000	12,040,532	12,040,532	+3,284,468	+1,578,468	—903,532	—229,532	—340,532	
1917.	11,633,000	11,949,000	12,499,000	12,047,000	12,037,000	11,302,376	11,302,376	+446,625	+1,196,625	+744,625	+187,070	—353,375	
1916.	14,266,000	12,916,000	11,800,000	11,637,000	11,511,000	11,449,930	11,449,930	+2,816,070	+1,466,070	+350,070	—241,820	+61,070	
1915.	—	—	—	—	15,966,000	16,134,930	16,134,930	—	—	—	—	—	—
1914.	—	—	—	—	15,966,000	16,134,930	16,134,930	—	—	—	—	—	—
1913.	—	—	—	—	13,677,000	14,156,486	14,156,486	—	—	—	—	—	—

¹ 1925 reports were dated June 25, July 16, August 16, September 16, and December 8.² March, 1926, guessing report.³ First monthly forecast made by Department of Agriculture was that of Sept. 25, 1915.

Computation of Cotton Crop Condition

The following statement from the Bureau of Agricultural Economics outlines the method used to obtain the government cotton crop condition estimate:

The condition figures published by this Bureau are based upon a normal condition. A normal condition is such a condition as would be expected at the date to which the report relates if conditions are favorable to the crop; that is to say, assuming that good seed had been planted under favorable conditions and that the crop had not suffered material injury from drought, storms, insect pests, plant diseases, or other unfavorable influences. Normal is not an ideal condition, but represents something rather close to the average of good years. The bearing of condition is upon final yield per acre rather than upon total production, because condition does not involve the question of acreage.

The yield per acre to be expected from a condition of 100 per cent or normal for any month is determined each year by a study of the relation of condition in that month to final yield in previous years. The reported per cent of a normal June 25 condition would, of course, indicate a corresponding per cent of the established normal yield per acre for June 25. This promised yield per acre, being multiplied by the number of acres, gives an indication of total production. All such forecasts are based upon the assumption that conditions affecting the crop developing after the date of report will be average, and that the final yield will prove greater or less than the forecast according as such future influences prove more or less favorable than in an average year.

A condition in June of 71 would not necessarily indicate the same production as the same figure for the following month because conditions average higher in June than in July for most crops, and distinctly so for cotton. The comparison each month is with normal conditions for that month. While the conditions of 71 per cent normal in June might be 80 per cent of the June *average* condition, the same per cent of July normal might be 90 per cent of July *average* condition and indicate a correspondingly higher yield.

Condition of American Cotton Crops on May 25

Source: United States Department of Agriculture

STATE	1918	1919	1920	1921	1922	1923	1924	1925
Virginia	89	89	71	77	91	79	62	72
North Carolina	84	85	70	65	84	77	71	74
South Carolina	80	78	68	58	67	64	68	71
Georgia	78	81	55	63	71	65	68	78
Florida	75	75	62	60	85	87	77	88
Alabama	78	78	58	57	80	70	70	80
Mississippi	86	73	65	60	75	70	69	84
Louisiana	85	74	72	57	70	68	70	84
Texas	82	76	60	71	61	77	66	70
Arkansas	85	68	61	70	76	66	58	85
Tennessee	90	64	60	69	79	70	54	82
Missouri	79	70	64	75	90	54	52	77
Oklahoma	86	65	70	74	67	63	58	86
California	91	91	86	75	84	93	91	98
Arizona	90	—	80	84	81	92	90	90
New Mexico	—	—	—	—	73	90	89	85
All other	—	—	—	—	—	—	—	90
United States	82.3	75.6	62.4	66.0	69.6	71.0	65.6	76.6

Condition of American Cotton Crops on June 25

Source: United States Department of Agriculture

STATE	1918	1919	1920	1921	1922	1923	1924	1925
Virginia	85	82	73	70	85	90	61	83
North Carolina	91	83	74	67	76	80	73	77
South Carolina	83	78	74	65	60	64	69	70
Georgia	80	72	63	64	58	56	75	76
Florida	79	57	63	70	75	65	79	84
Alabama	84	67	67	59	68	68	70	79
Mississippi	90	63	69	67	76	67	74	88
Louisiana	87	61	77	64	69	69	78	81
Texas	84	69	71	72	72	77	70	64
Arkansas	91	64	72	78	80	66	68	87
Tennessee	94	64	69	74	83	67	67	85
Missouri	93	60	72	80	92	62	60	90
Oklahoma	90	69	77	75	76	64	72	88
California	93	99	83	77	91	91	90	95
Arizona	96	93	80	88	85	92	92	92
New Mexico	—	—	—	—	—	80	80	88
All other	—	—	—	—	—	—	72	94
United States	85.8	70.0	70.7	69.2	71.2	69.9	71.2	75.9

Condition of American Cotton Crops on July 25

Source: United States Department of Agriculture

STATE	1918	1919	1920	1921	1922	1923	1924	1925 ¹
Virginia	75	80	74	82	80	88	54	76
North Carolina	87	76	77	75	78	82	56	77
South Carolina	80	71	77	62	60	64	59	71
Georgia	77	67	68	59	54	48	76	74
Florida	70	50	64	60	65	52	76	82
Alabama	78	64	67	58	70	66	70	78
Mississippi	81	63	71	68	74	65	70	83
Louisiana	65	52	71	59	70	68	66	76
Texas	61	67	74	62	72	71	69	56
Arkansas	77	63	78	76	81	68	70	85
Tennessee	86	67	76	75	85	69	68	79
Missouri	93	67	81	80	90	70	65	80
Oklahoma	75	75	85	68	75	63	72	76
California	95	100	85	83	95	88	90	92
Arizona	95	93	85	89	86	91	94	94
New Mexico	—	—	—	88	85	85	83	82
All other	—	—	—	—	—	—	70	79
United States	73.6	67.1	74.1	64.7	70.8	67.2	68.5	70.4

¹ Condition on July 16. Change due to the inauguration of semi-monthly reports.**Condition of American Cotton Crops on August 25**

Source: United States Department of Agriculture

STATE	1918	1919	1920	1921	1922	1923	1924	1925 ¹
Virginia	84	67	81	63	68	93	62	79
North Carolina	77	70	79	62	65	71	59	75
South Carolina	67	67	71	50	46	57	59	53
Georgia	66	55	58	41	44	42	70	61
Florida	60	38	57	59	60	30	72	78
Alabama	66	55	58	53	60	52	70	70
Mississippi	67	61	60	57	60	48	65	77
Louisiana	53	47	55	45	60	53	50	65
Texas	43	61	67	42	59	55	61	46
Arkansas	52	65	75	63	63	57	71	79
Tennessee	58	69	75	74	65	64	72	82
Missouri	60	75	83	78	70	67	70	81
Oklahoma	33	71	84	48	53	46	75	74
California	92	98	80	83	91	88	90	93
Arizona	96	90	86	85	87	90	85	92
New Mexico	—	—	—	—	85	88	92	77
All other	—	—	—	—	—	—	75	92
United States	55.7	61.4	67.5	49.3	57.0	54.1	64.9	62.0

¹ Condition on August 16.

Condition of American Cotton Crops on September 25

Source: United States Department of Agriculture

STATE	1918	1919	1920	1921	1922	1923	1924	1925
Virginia	84	64	72	53	63	83	60	64
North Carolina	74	61	68	54	59	64	52	62
South Carolina	65	61	62	40	38	53	47	43
Georgia	62	49	51	33	37	31	59	53
Florida	50	35	50	50	55	20	71	71
Alabama	63	45	49	46	55	42	59	64
Mississippi	64	52	50	48	54	37	57	73
Louisiana	52	38	47	41	53	45	48	70
Texas	44	52	61	38	52	56	52	42
Arkansas	50	60	65	53	57	50	59	64
Tennessee	59	64	66	62	56	47	60	60
Missouri	61	58	75	70	70	64	63	64
Oklahoma	33	72	70	38	42	49	64	55
California	90	95	78	73	80	84	77	90
Arizona	93	92	90	81	80	90	72	92
New Mexico	-	-	-	-	-	84	85	85
All other	-	-	-	-	-	-	77	75
United States	54.4	54.4	59.1	42.2	50.0	49.5	55.4	53.8

1 Condition on September 16.

Condition of American Cotton Crop on Reporting Dates in 1925

Source: United States Department of Agriculture

STATE	May 25	June 25	July 16	August 1	August 16	September 1	September 16
Virginia	72	83	76	75	79	68	64
North Carolina	74	77	77	75	75	68	62
South Carolina	71	70	71	62	53	46	43
Georgia	78	76	74	66	61	55	53
Florida	88	84	82	80	78	78	71
Alabama	80	79	78	74	70	65	64
Mississippi	84	88	83	81	77	74	73
Louisiana	84	81	76	69	65	67	70
Texas	70	64	56	49	46	43	42
Arkansas	85	87	85	87	79	69	64
Tennessee	82	85	79	82	82	66	60
Missouri	77	90	80	84	81	70	64
Oklahoma	86	88	76	72	74	61	55
California	98	95	92	90	93	90	90
Arizona	90	92	94	92	92	92	92
New Mexico	85	88	82	75	77	88	85
All other	90	94	79	89	92	76	75
United States	76.6	75.9	70.4	65.6	62.0	56.2	53.8

United States Cotton Production, per Acre, by States

[In pounds]

Source: United States Department of Agriculture

STATE	1917	1918	1919	1920	1921	1922	1923	1924	1925 ¹
United States	160	160	161.5	178	124.5	141.3	130.6	157.4	165.5
Alabama .	125	149	122	111	124	142	91	154	186
Arizona .	285	280	270	224	242	222	292	285	286
Arkansas .	170	158	155	195	161	173	98	169	199
California .	242	270	268	266	258	188	285	284	370
Florida .	100	85	74	86	80	102	40	130	172
Georgia .	173	190	152	138	90	100	82	157	158
Louisiana .	210	167	93	126	114	144	125	145	227
Mississippi .	155	187	160	145	148	157	91	176	264
Missouri .	190	200	257	275	325	360	171	185	235
New Mexico .	—	—	—	—	—	—	230	266	289
North Carolina	194	268	266	275	264	250	290	196	238
Oklahoma .	165	92	195	230	104	103	98	187	150
South Carolina	208	250	240	260	140	123	187	160	155
Tennessee .	130	175	195	185	228	190	92	170	191
Texas .	135	115	140	174	98	130	147	138	117
Virginia .	180	270	255	230	230	230	325	180	242
All other .	—	—	—	—	—	—	226	164	246

¹ Data for 1925 are preliminary estimates.

Average Grades of Recent Cotton Crops

Henry G. Hester, Secretary of the New Orleans Cotton Exchange, computes the average grades of recent American cotton crops to have been as follows:

1916-17, middling to strict middling.
 1917-18, middling.
 1918-19, barely middling.
 1919-20, strict low middling.
 1920-21, barely middling.
 1921-22, middling.
 1922-23, middling.
 1923-24, strict low middling to middling.
 1924-25, middling.

United States Production of Cotton and Linters

Source: United States Bureau of the Census

GROWTH YEAR	COTTON, EXCLUSIVE OF LINTERS		LINTERS		COTTON, INCLUDING LINTERS	
	Running Bales, counting Round as Half Bales	Equivalent 500-Pound Bales Gross Weight	Running Bales	Equivalent 500-Pound Bales Gross Weight	Running Bales, counting Round as Half Bales	Equivalent 500-Pound Bales Gross Weight
1900	10,102,102	10,123,027	143,500	143,500	10,245,602	10,266,527
1901	9,582,520	9,509,745	166,026	166,026	9,748,546	9,675,771
1902	10,588,250	10,630,945	196,223	196,223	10,784,473	10,827,168
1903	9,819,969	9,851,129	195,752	194,486	10,015,721	10,045,615
1904	13,451,337	13,438,012	245,973	241,942	13,697,310	13,679,954
1905	10,495,105	10,575,017	230,497	229,539	10,725,602	10,804,556
1906	12,983,201	13,273,809	322,064	321,689	13,305,265	13,595,498
1907	11,057,822	11,107,179	268,060	268,282	11,325,882	11,375,461
1908	13,086,005	13,241,799	346,126	345,507	13,432,131	13,587,306
1909	10,072,731	10,004,949	313,478	310,433	10,386,209	10,315,382
1910	11,568,334	11,608,616	397,628	397,072	11,965,962	12,005,688
1911	15,553,073	15,692,701	556,276	557,575	16,109,349	16,250,276
1912	13,488,539	13,703,421	602,324	609,594	14,090,863	14,313,015
1913	13,982,811	14,156,486	631,153	638,881	14,613,964	14,795,367
1914	15,905,840	16,134,930	832,401	856,900	16,738,241	16,991,830
1915	11,068,173	11,191,820	944,640	931,141	12,012,813	12,122,961
1916	11,363,915	11,449,930	1,300,163	1,330,714	12,664,078	12,780,644
1917	11,248,242	11,302,375	1,096,422	1,125,719	12,344,664	12,428,094
1918	11,906,480	12,040,532	910,236	929,516	12,816,716	12,970,048
1919	11,325,532	11,420,763	595,093	607,969	11,920,625	12,028,732
1920	13,270,970	13,439,603	429,005	440,313	13,699,975	13,879,916
1921	7,977,778	7,953,641	382,375	397,752	8,360,153	8,351,393
1922	9,729,306	9,762,069	590,537	607,779	10,319,843	10,369,848
1923	10,170,694	10,139,671	639,540	668,600	10,810,234	10,808,271
1924	13,639,399	13,627,936	857,962	897,375	14,497,361	14,525,311

Summary of Commercial Crops of American Cotton

[In running bales, including linters]

Source: New Orleans Cotton Exchange

	1920-21	1921-22	1922-23	1923-24	1924-25
Port receipts	7,088,492	6,402,985	5,935,645	6,591,008	9,557,735
Overland to mills	1,465,385	1,647,570	1,267,819	880,814	1,294,406
Southern consumption	3,096,504	3,942,416	4,487,535	3,985,328	4,380,118
Total movement	11,650,381	11,992,971	11,690,999	11,817,150	15,232,259
Less taken by southern mills from ports	273,065	339,838	408,193	526,753	533,903
Total crops	11,377,316	11,653,133	11,282,806	11,290,397	14,698,356

United States Commercial Crops of Cotton

Source: New Orleans Cotton Exchange

STATE	1920-21	1921-22	1922-23	1923-24	1924-25
Alabama	607,000	733,000	981,000	710,000	1,042,000
Arkansas	1,113,000	995,000	1,118,000	725,000	1,163,000
Florida	18,000	13,000	30,000	15,000	21,000
Georgia	850,000	1,629,000	1,035,000	790,000	1,135,000
Louisiana	362,000	337,000	368,000	394,000	515,000
Oklahoma	1,190,000	709,000	664,000	705,000	1,610,000
Mississippi	856,000	1,033,000	1,108,000	758,000	1,220,000
North Carolina, etc. ¹	839,000	1,053,000	1,068,000	1,262,000	972,000
South Carolina	1,046,000	1,546,000	799,000	920,000	903,000
Tennessee, etc. ²	514,000	565,000	675,000	609,000	878,000
Texas	3,982,000	3,040,000	3,437,000	4,402,000	5,239,000
Total crop	11,377,000	11,653,000	11,283,000	11,290,000	14,698,000

¹ Including Virginia and Kentucky.

² Including Missouri, California, Arizona, etc.

United States Production of Cotton, Exclusive of Linters

[Running bales, counting round as half bales]

Source: United States Bureau of the Census

STATE	1920	1921	1922	1923	1924	1925 ¹
Alabama	670,330	587,669	819,870	599,140	985,653	1,355,767
Arizona	105,191	42,926	44,132	77,704	109,950	115,359
Arkansas	1,182,010	788,047	1,010,520	643,643	1,086,814	1,593,029
California	77,892	34,809	28,473	55,313	79,938	120,915
Florida	19,443	12,202	27,428	13,628	19,756	40,194
Georgia	1,447,159	822,621	735,874	612,812	1,030,202	1,192,082
Louisiana	389,569	284,330	345,407	373,812	498,396	911,540
Mississippi	900,371	816,961	985,787	622,617	1,116,350	1,974,335
Missouri	76,328	68,145	139,881	124,676	192,981	293,128
New Mexico	—	—	—	28,333	55,858	64,704
North Carolina	949,484	803,620	879,294	1,053,402	860,147	1,146,569
Oklahoma	1,302,610	477,777	637,003	665,904	1,506,077	1,680,051
South Carolina	1,652,177	786,039	517,464	793,817	837,815	928,589
Tennessee	314,811	297,555	385,860	235,344	355,919	513,020
Texas	4,148,399	2,129,660	3,125,758	4,212,248	4,850,956	4,097,009
Virginia	21,898	16,680	27,011	51,982	40,180	53,856
All other states	13,298	8,737	19,544	6,319	12,417	23,439
Total	13,270,970	7,977,778	9,729,306	10,170,594	13,639,399	16,103,586

¹ March, 1926, preliminary report.

Active and Idle Ginneries in the United States and Average Number of Running Bales ginned per Active Establishment

Source: United States Bureau of the Census

GROWTH YEAR	Total Ginneries	Active Ginneries	Idle Ginneries	Bales ginned per Establishment
1915	26,721	23,162	3,559	478
1916	25,999	21,624	4,375	526
1917	24,272	20,351	3,921	553
1918	23,439	19,259	4,180	618
1919	22,418	18,815	3,603	602
1920	21,876	18,440	3,436	720
1921	20,938	16,192	4,746	493
1922	19,939	15,420	4,519	631
1923	19,195	15,298	3,897	665
1924	18,656	15,478	3,178	881

Estimated Values of Cotton and Cotton Seed produced

Source: United States Bureau of the Census

GROWTH YEAR	Value of Cotton produced	Value of Cotton Seed produced	Total Value of Cotton Crop
1915	\$627,940,000	\$167,900,000	\$795,840,000
1916	994,060,000	259,070,000	1,253,130,000
1917	1,532,690,000	333,550,000	1,866,240,000
1918	1,737,710,000	349,490,000	2,087,200,000
1919	2,030,960,000	340,470,000	2,371,430,000
1920	1,067,240,000	136,990,000	1,204,230,000
1921	675,630,000	104,560,000	780,190,000
1922	1,117,060,000	150,400,000	1,267,460,000
1923	1,455,170,000	190,050,000	1,645,220,000
1924	1,561,010,000	206,220,000	1,767,230,000

Yearly Average Prices of Cotton and Cotton Seed paid to Producers in the United States

Source: United States Bureau of the Census

CROP YEAR	Yearly Average Price of Lint Cotton per Pound (in Cents)	Yearly Average Price of Cotton Seed per Ton
1915	11.22	\$33.60
1916	17.28	50.50
1917	27.12	66.08
1918	28.76	65.32
1919	35.36	67.18
1920	15.89	22.92
1921	16.90	29.72
1922	22.85	34.70
1923	28.70	42.22
1924	22.91	34.16

Cotton ginned to Specified Dates and throughout the Season

[Running bales, except that round bales are counted as half bales. Linters are not included]

Source: United States Bureau of the Census

COTTON GINNED TO —	YEAR OF GROWTH					
	1920	1921	1922	1923	1924	1925 ¹
September 1	351,589	485,787	806,189	1,142,660	958,204	1,892,549
September 25	2,249,606	2,920,392	3,866,396	3,235,974	4,525,520 ²	7,101,710 ²
October 18	5,754,582	5,497,364	6,978,321	6,409,391	7,600,826	9,519,784
November 1	7,508,633	6,646,354	8,139,215	7,556,042	9,694,920	11,198,660
November 14	8,914,642	7,274,201	8,869,978	8,369,498	11,147,524	12,249,935
December 1	10,141,293	7,639,961	9,319,601	9,243,380	12,225,025	13,857,686
December 13	10,876,263	7,790,656	9,488,852	9,549,015	12,796,216	14,826,452
January 1	11,554,648	7,882,356	9,597,330	9,811,038	— ³	— ³
January 16	12,014,742	7,912,452	9,648,261	9,944,032	13,308,037	15,488,230
Total gin- nings	13,270,970	7,977,778	9,729,306	10,170,594	13,630,608	16,103,586

¹ March, 1926, preliminary report.

² Ginned to October 1.

³ No ginning report.

Per Cent of Total Cotton ginned to Specified Dates

Source: United States Bureau of the Census

PER CENT GINNED TO —	YEAR OF GROWTH						
	1919	1920	1921	1922	1923	1924	1925 ¹
September 1	1.3	2.6	6.1	8.3	11.2	7.0	11.7
September 25	16.2	17.0	36.6	39.7	31.8	33.2 ²	44.1 ²
October 18	43.5	43.4	68.9	71.7	63.0	55.7	59.1
November 1	55.7	56.6	83.3	83.7	74.3	71.1	69.5
November 14	67.1	67.2	91.2	91.2	82.3	81.7	76.0
December 1	78.1	76.4	95.8	95.8	90.9	89.6	86.0
December 13	83.0	82.0	97.7	97.5	93.9	93.1	92.0
January 1	88.4	87.1	98.8	98.6	96.4	— ³	— ³
January 16	91.0	90.5	99.2	99.2	97.8	97.6	96.1

¹ Preliminary estimates.

² Ginned to October 1.

³ No ginning report.

Estimated Quantity of Cotton Seed produced, Quantity of Cotton Seed crushed, and Quantities and Values of Crude Products obtained

Statistics of the quantity of seed produced relate to the preceding crop year. Those of the quantity crushed and of the quantities and values of products obtained relate to the year ending July 31.

Source: United States Bureau of the Census

YEAR	Cotton Seed produced (Tons)	Cotton Seed crushed (Tons)	Total Value of Products	Quantity of Oil (Gallons)	Value of Oil	Quantity of Cake and Meal (Tons)	Value of Cake and Meal	Quantity of Hulls (Tons)	Value of Hulls	Quantity of Linters (500-Pound Bales)	Value of Linters
1912	6,997,000	4,921,073	\$131,340,000	201,650,000	\$66,580,000	2,151,000	\$49,720,000	1,642,000	\$9,890,000	533,099	\$5,150,000
1913	6,104,000	4,579,508	132,230,000	185,750,000	69,100,000	1,999,000	45,970,000	1,540,000	9,710,000	583,091	7,450,000
1914	6,305,000	4,847,628	159,670,000	193,330,000	81,020,000	2,220,000	59,810,000	1,400,000	11,210,000	660,087	7,630,000
1915	7,186,000	5,779,665	152,880,000	229,260,000	80,540,000	2,648,000	57,740,000	1,677,000	8,450,000	820,274	6,150,000
1916	4,992,000	4,202,313	180,260,000	167,110,000	87,940,000	1,923,000	53,860,000	1,220,000	12,340,000	889,577	26,120,000
1917	5,113,000	4,479,176	287,192,000	187,688,000	153,419,000	2,225,000	74,586,000	969,000	13,994,000	1,273,345	45,193,000
1918	5,040,000	4,251,680	360,736,000	174,996,000	217,902,000	2,068,000	97,352,000	996,000	18,878,000	1,080,802	26,604,000
1919	5,360,000	4,478,508	383,580,000	176,711,000	227,316,000	2,170,000	116,119,000	1,137,000	17,917,000	889,500	22,228,000
1920	5,074,000	4,012,704	352,138,000	161,529,000	209,668,000	1,817,000	119,039,000	1,143,000	11,095,000	584,146	12,336,000
1921	5,971,000	4,069,166	156,513,000	174,558,000	84,650,000	1,786,000	58,298,000	1,256,000	10,059,000	422,226	3,506,000
1922	3,531,000	3,007,717	136,974,000	124,063,000	71,508,000	1,355,000	49,898,000	937,000	8,949,000	383,547	6,619,000
1923	4,336,000	3,241,557	173,254,000	133,723,000	84,818,000	1,487,000	59,037,000	944,000	12,200,000	584,177	17,199,000
1924	4,502,000	3,307,598	182,137,000	130,616,000	88,093,000	1,518,000	59,300,000	941,000	12,737,000	642,348	22,007,000
1925	6,051,000	4,605,227	240,855,000	187,170,824	126,665,000	2,125,618	79,173,000	1,330,764	13,749,000	859,624	21,208,000

Review of Last Seven American Cotton Crops, 1919 to 1925

1919. The acreage planted in 1919 was about the average for the few years immediately preceding, the area under cultivation at the end of June being 35,133,000 acres. Weather conditions during the spring were decidedly unfavorable. Frequent rains in March delayed preparation of the soil and planting, cool weather in April retarded germination and growth, frost late in April damaged the plant in the Carolinas, while frequent rains and persistently cool weather during May continued to affect the cotton adversely in most sections of the belt. The eastern section suffered the least, and there the condition of the crop at the end of May was fairly good, but in most of the western portions of the belt the crop was in very poor condition. Similar conditions continued through June, more particularly in the western and southern portions of the belt. In July the weather was more favorable in the West, the rainfall being much less than earlier in the season, but in the East there was too much rain, resulting in rank growth of stalk. Weather conditions caused much damage by insect pests. During August the weather was fairly favorable in most sections and the crop made moderate progress, but at the end of the month the situation was unsatisfactory over large sections of the belt. There was a great variety of weather in different sections during September, resulting in good progress in some states and deterioration elsewhere. October was decidedly unfavorable, persistent rains resulting in bolls decaying, seed sprouting, and discoloration of open cotton. The rains continued well into November. Extensive killing frost occurred in the Gulf States about the middle of November. Boll weevil injury during 1919 was decidedly variable in its intensity, but in the country as a whole was comparatively light. The acreage harvested was 33,566,000. The average yield per acre was low, being only 161.5 pounds. The crop was the fifth short one in succession, totalling only 11,325,532 running bales, counting round as half bales, exclusive of linters. Linters totalled 595,093 bales, making the total crop, including linters, 11,920,625 bales.

1920. A large area was planted to cotton in 1920, there being 37,043,000 acres under cultivation at the end of June. In only three years, 1913, 1914 and 1918, had this acreage been exceeded. The record acreage of 1913 was not very much larger than this, being 37,458,000. The 1920 crop got a poor start. Low temperatures and excessive rains delayed planting in some parts of the belt, and in other sections damaged the plants to such an extent that replanting was necessary. The crop was in poor condition at the end of May in all sections of the belt, especially in Texas and the Southeast. Much better weather prevailed in

June, with resulting steady, and, in some parts of the belt, rather pronounced improvement. Weather conditions were normal during the first two weeks of July, but less so in the last week, due to frequent rains and lack of sunshine in Florida, Alabama, parts of Mississippi and in Louisiana. These conditions caused shedding and weevil activity. During August the crop made satisfactory advance in the more western and northwestern portions of the belt, but in the Southern States excessive rainfall interfered with its progress. At the end of the month the crop was in poor condition over a large part of the South, particularly Louisiana, Mississippi, Alabama, Georgia and Florida. The weather in September generally favored rapid opening of the bolls and quick harvesting. In October continued mild weather brought to maturity the late plants in the Northeastern States. The acreage harvested was 35,878,000. The average yield per acre was fairly good, being 178.4. The crop was the first of even average size since 1914. It totalled 13,270,970 running bales, counting round as half bales, exclusive of linters. The linters totalled 429,005 bales, making the total crop, including linters, 13,699,975 bales.

1921. The 1921 cotton crop was notable, not only on account of its smallness, but also because of the unusual degree to which the government and the trade misjudged its size until after picking was practically completed. As a result of the great decline in the price of the staple during the preceding season, a determined campaign was conducted throughout the belt to reduce the acreage, and the general impression through most of the growing season was that the area planted had actually been cut by fully 25 per cent as compared with 1920. This was confirmed by the Department of Agriculture, which reported in June that the acreage was 28.4 per cent less than the year previous and aggregated only 26,519,000 acres. At the very beginning of the season, weather conditions were generally favorable, but later, during April, excessive rains and low temperatures did much damage and forced a great deal of replanting. May was more propitious, and in June the crop continued to make some progress, but on the whole the crop was in a very unsatisfactory condition at the end of June. Usually a low condition in one section of the belt is offset by fair to good conditions elsewhere, but in 1921 the condition at the close of June was low in almost all sections. In July the crop continued to lose ground slowly, and in August it deteriorated rapidly, largely due to an extensive drought in Texas, Oklahoma and Louisiana, excessive rains in some parts of the belt east of the Mississippi, and extraordinary ravages by the boll weevil. The result of all these adverse factors was that the government announced in September that the condition as of August 25 war-

ranted a forecast of only 7,037,000 bales, and in October, taking the condition of September 25 as a basis, it predicted a crop of only 6,537,000 bales. These estimates, however, proved to be unduly low, not so much because of underestimating the yield per acre as because, as it was afterward shown, the acreage itself had been greatly understated. In December the Department announced that it was obliged, by information that it had received during the latter part of the season, to raise its estimate of the acreage from 26,519,000 to 31,678,000 acres. Only 30,509,000 acres were harvested, yielding 124.5 per acre. The crop totalled only 7,977,778 running bales exclusive of linters, and was the smallest in size since 1895. Linters aggregated 382,375 bales, making the total crop, including linters, 8,360,153.

1922. The boll weevil held the centre of the stage during 1922. It was hoped that after the small 1921 crop, 1922 would bring a pre-war normal, or at least one around 12,000,000 bales, but on June 25 the government forecast of 11,065,000 bales and 34,016,000 acres, and a month later of 11,449,000 bales dampened this somewhat. The season, however, was late, and heavy rains and low temperatures kept the crop back. Replanting was necessary in many instances and caused the weevil to be even more formidable as the advantage to be gained by an early start was lost. Drought in the Western States which mitigated against the pest also affected the crop seriously, so that hopes for a fair yield per acre were soon dissipated. The critical months of July and August brought an unusual condition. Would the poorly rooted crop resulting from a wet spring be damaged by hot weather unfavorable to the weevil? The answer was a split between hot weather damage in the Southwest and the boll weevil in the East. As a result the crop estimate fell to 10,575,000 bales on August 25 and to 10,135,000 on September 25. Picking and ginning were rapid, and growers were disposed to sell just as rapidly, so the crop came on the market speedily. The December forecast of 9,964,000 caused further disappointment. Actual production amounted to 9,762,069 bales from 33,036,000 acres, or a yield of 141.5 pounds per acre.

1923. The tremendous acreage of 38,287,000 was under cultivation on June 25, as it was expected the world would readily consume a large crop after the small production of the two previous years. Unfortunately weather conditions were not propitious. A season which promised to be early turned out late. Much rain fell in the East during August, and the temperature was below normal. In the West, especially Texas and Oklahoma, a severe drought extended through July and August. The government forecast fell from 11,412,000 bales on June 25 to 10,081,000 in December. The March report of cotton ginned was

10,128,478 bales of 500 pounds each, and indicates a yield of 128.8 pounds per acre, based on 37,420,000 acres harvested. It seems weather conditions and not the boll weevil should be emphasized in discussing the 1923 crop. The weevil can be controlled, but the weather cannot. The weather, furthermore, is the supreme factor in raising cotton, and it must be acknowledged that in recent years excessive rain and drought have been to a great extent determining causes of small production.

1924. The crop of 1924 was one of surprises. The planting season was wet and cold. Many growers feared this would counteract the effects of the cold weather which had greatly reduced the number of boll weevils. May, however, proved a favorable month, and the record-breaking acreage planted (41,390,000) gave rise to hopes of a large crop.

June marked the beginning of a long drought which persisted in nearly all sections throughout the season. The crop withstood the dry weather satisfactorily as a result of the ample moisture in the soil. As the season progressed favorable conditions caused both government and private forecasts of the crop to be increased steadily. The much-discussed semi-monthly forecasts of the Department of Agriculture were inaugurated during the season of 1924.

The fall weather proved nearly ideal for harvesting the crop, and picking and ginning were carried on at a record pace. The March ginning report shows a crop of 13,618,751 bales, the largest crop in ten years. This figure indicates a yield of 162 pounds per acre as compared with the five-year average yield of 147 pounds per acre.

The boll weevil, a factor of utmost importance in previous years, did not play an important part in 1924. The cold winter and dry summer conspired to reduce the number of weevils very materially. The small amount of weevil damage and the large acreage planted were the outstanding features of the year's cotton crop.

1925. The planting season of 1925 started favorably, and a very large acreage was planted to cotton throughout the South. In fact, the acreage planted in 1925 established a new record, the government estimate of June 25 giving a figure of 46,448,000 acres. Later developments were less favorable, however, and considerable replanting became necessary in certain sections.

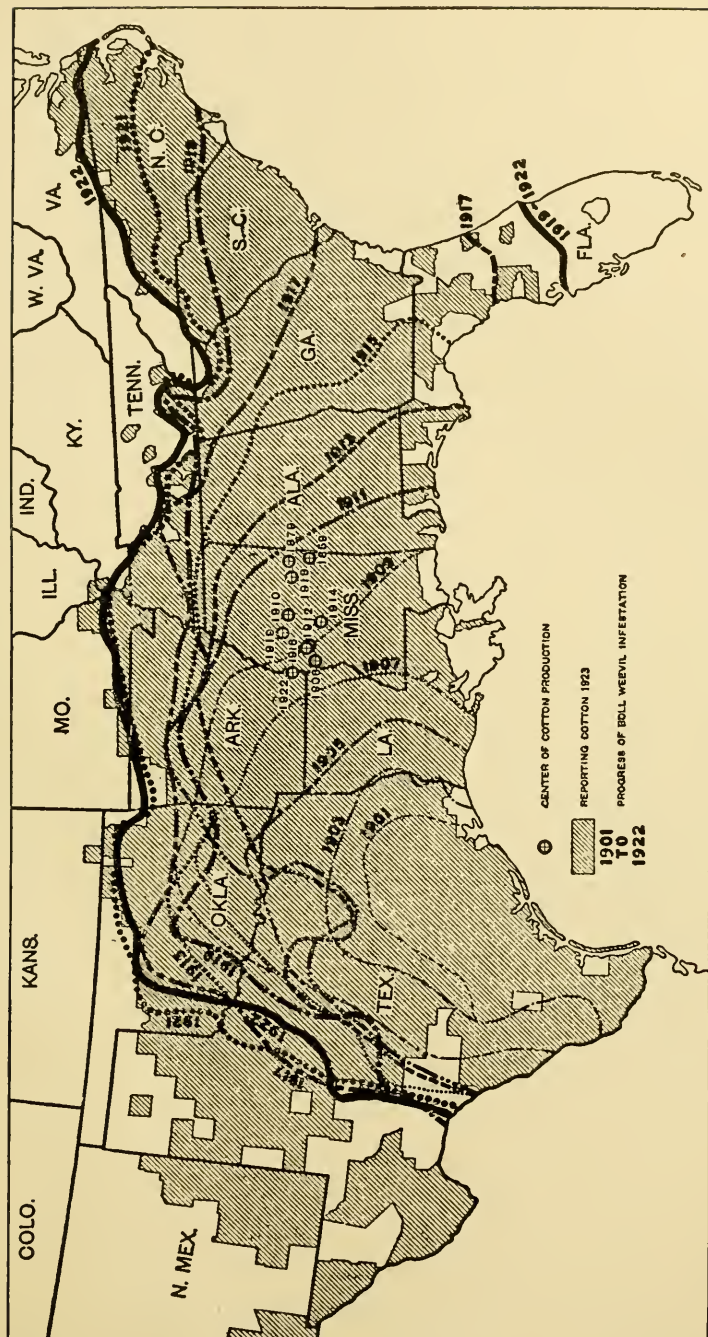
In midsummer a large part of the western half of the belt began to suffer from lack of moisture. The drought which was especially serious in southern Texas was not relieved until fall, so that over a considerable area the crop was practically a failure and many fields were completely abandoned. Outside of this southwestern territory, which was

affected by abnormally light rainfall, the crop progressed satisfactorily in practically all sections.

The rather hot and dry weather which prevailed during a large part of the season aided in keeping the weevil in check, so that comparatively little damage was suffered from this cause.

The large acreage planted permitted and made possible a satisfactory crop in spite of the failure of some relatively limited areas. The March ginning report indicates a crop of 16,103,586 bales, the largest in ten years. One outstanding feature of the year's growth was the very large quantities of low grades produced, especially in some sections where replanting had made the crop late.

The American Cotton Belt



Percentage of Loss of Cotton due to Boll Weevil, 1911-24

[Expressed in percentage of a normal or full yield per acre]

Source: United States Department of Agriculture

STATE	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924
North Carolina .	-	-	-	-	-	-	-	-	-	-	3.58	12.27	12.97	7.49
South Carolina .	-	-	-	-	.02	.02	.01	.07	3.00	13.26	31.48	40.48	26.95	15.93
Georgia .	-	-	.10	-	.28	3.44	9.06	10.73	19.36	30.56	45.12	44.28	36.62	15.11
Florida .	-	.30	11.80	-	13.14	20.98	27.07	23.85	40.46	32.10	27.62	32.50	32.53	27.73
Tennessee .	-	-	.10	.08	.04	1.23	1.74	.37	.17	.57	7.21	8.84	20.75	2.38
Alabama .	.20	1.50	4.80	6.02	16.16	27.91	28.88	12.14	28.77	36.03	32.39	25.51	32.52	11.77
Mississippi .	5.10	18.00	33.90	24.14	24.68	31.73	22.22	10.41	19.56	32.25	30.38	27.65	30.82	7.38
Louisiana .	11.40	13.70	25.10	17.66	19.85	24.31	11.89	9.79	24.84	25.99	34.80	24.61	23.25	4.59
Texas .	.90	2.80	6.80	7.86	16.28	18.53	7.26	4.43	13.96	19.90	33.66	16.25	9.96	7.63
Oklahoma .	.20	.50	.40	.79	2.70	3.70	4.35	1.30	1.48	8.81	41.36	25.67	19.33	3.93
Arkansas .	2.00	2.40	2.80	2.93	4.60	7.49	8.96	3.14	4.79	9.41	21.84	18.15	15.87	3.70
United States average ¹ .	1.28	3.26	6.69	5.91	9.93	13.36	9.34	5.83	13.20	19.95	30.98	24.17	19.55	8.01

¹ Average is weighted and includes cotton States in which there was no damage by boll weevil.

Indian Cotton Production

These statistics embrace all cotton produced in India, including that used in house manufacture as well as that taken by factories or exported.

[In bales of 400 pounds each]

Source: Indian Department of Statistics

PROVINCES AND STATES	1921-22	1922-23	1923-24	1924-25	1925-26 ¹
Bombay ²	1,085,000	1,328,000	1,212,000	1,538,000	1,298,000
Central Provinces and Berar	1,127,000	1,040,000	1,020,000	1,050,000	948,000
Madras ²	336,000	431,000	484,000	559,000	428,000
Punjab ²	296,000	397,000	630,000	893,000	856,000
United Provinces ²	244,000	180,000	213,000	275,000	277,000
Sind ²	52,000	— ³	— ³	— ³	— ³
Burma	40,000	45,000	46,000	70,000	78,000
Bengal ²	15,000	17,000	21,000	24,000	26,000
Bihar and Orissa	15,000	15,000	16,000	14,000	15,000
North-West Frontier	3,000	3,000	5,000	8,000	7,000
Assam	12,000	14,000	14,000	15,000	13,000
Delhi	300	1,000	1,000	1,000	1,000
Ajmer-Merwara	12,000	15,000	13,000	15,000	17,000
Hyderabad	870,000	1,116,000	1,079,000	899,000	970,000
Central India	204,000	181,000	162,000	239,000	228,000
Baroda	85,000	116,000	76,000	171,000	168,000
Rajputana	68,000	76,000	73,000	87,000	90,000
Mysore	15,000	24,000	15,000	36,000	24,000
Gwalior	—	74,000	60,000	94,000	124,000
Total	4,479,000	5,073,000	5,140,000	5,988,000	5,569,000

¹ December, 1925, estimate.

² Includes Indian States.

³ Included in Bombay.

Indian Cotton Yield per Acre

[In pounds]

Source: Indian Department of Statistics

PROVINCES AND STATES	1920-21	1921-22	1922-23	1923-24	1924-25	1925-26 ¹
Bombay ²	66	96	90	71	82	72
Central Provinces and Berar	46	102	102	83	81	71
Madras ²	64	79	75	73	78	78
Punjab ²	110	93	115	131	141	118
United Provinces ²	116	119	108	130	105	110
Sind ²	60	145	172	— ³	— ³	— ³
Burma	67	52	66	61	86	79
Bengal ²	120	91	94	118	125	135
Bihar and Orissa	79	75	75	79	71	76
North-West Frontier	74	80	80	87	82	87
Assam	141	113	130	144	133	108
Delhi	—	80	152	133	100	67
Ajmer-Merwara	143	185	167	127	133	126
Hyderabad	62	119	117	123	105	104
Central India	49	70	97	66	71	72
Baroda	64	57	80	46	104	81
Rajputana	87	92	101	88	87	89
Mysore	40	102	116	71	122	126
Gwalior	—	—	—	48	54	74
Average	68	97	98	87	91	85

¹ December, 1925, estimate.

² Includes Indian States.

³ Included in Bombay.

Indian Cotton Acreage

Source: Indian Department of Statistics

PROVINCES AND STATES	1921-22	1922-23	1923-24	1924-25	1925-26 ¹
Bombay ²	4,532,000	5,817,000	6,788,000	7,510,000	7,203,000
Central Provinces and Berar	4,414,000	4,857,000	4,933,000	5,202,000	5,366,000
Madras ²	1,803,000	2,348,000	2,663,000	2,866,000	2,192,000
Punjab ²	1,239,000	1,394,000	1,927,000	2,536,000	2,894,000
United Provinces ²	828,000	664,000	654,000	1,046,000	1,005,000
Sind ²	144,000	— ³	— ³	— ³	— ³
Burma	325,000	284,000	301,000	326,000	394,000
Bengal ²	65,000	72,000	71,000	77,000	77,000
Bihar and Orissa	79,000	80,000	81,000	79,000	79,000
North-West Frontier	15,000	15,000	23,000	39,000	32,000
Assam	40,000	40,000	39,000	45,000	48,000
Delhi	2,000	2,000	3,000	4,000	6,000
Ajmer-Merwara	26,000	36,000	41,000	45,000	54,000
Hyderabad	2,914,000	3,813,000	3,500,000	3,412,000	3,713,000
Central India	1,069,000	889,000	982,000	1,352,000	1,268,000
Baroda	600,000	585,000	657,000	658,000	827,000
Rajputana	297,000	302,000	330,000	401,000	403,000
Mysore	59,000	83,000	84,000	118,000	76,000
Gwalior	—	523,000	500,000	699,000	668,000
Total	18,451,000	21,804,000	23,577,000	26,415,000	26,305,000

¹ December, 1925, estimate.

² Includes Indian States.

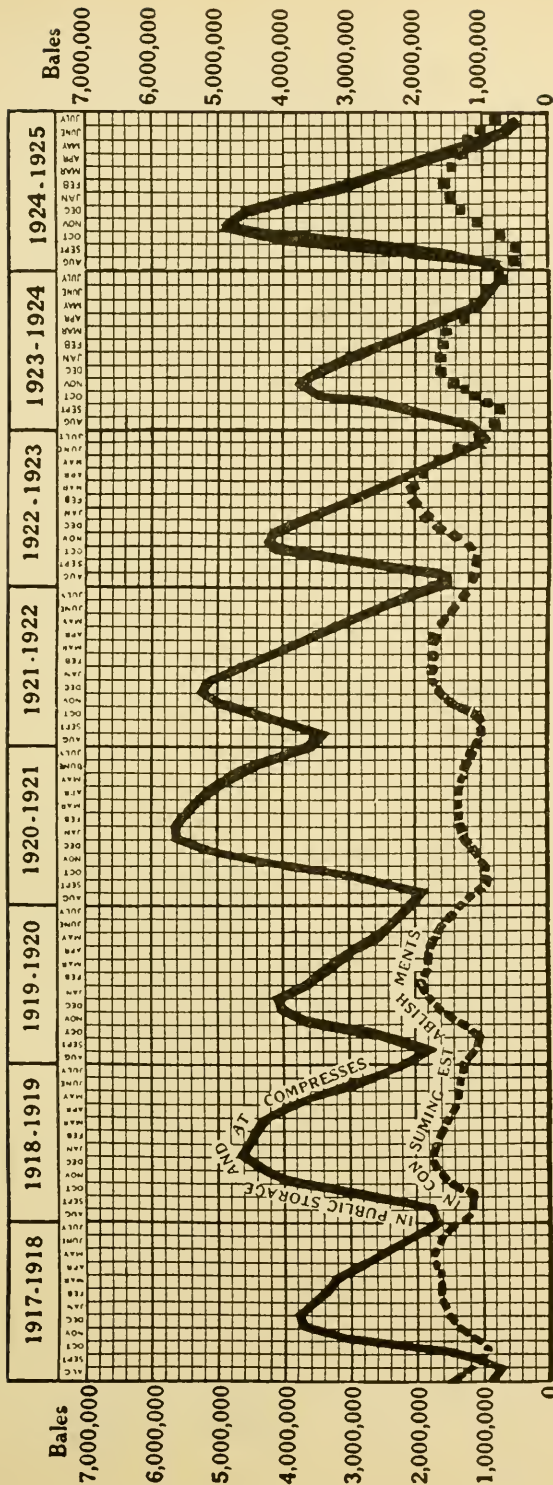
³ Included in Bombay.

United States Stocks of Cotton and Linters

[American cotton in running bales, counting round as half bales; foreign cotton in equivalent 500-pound bales]

Source: United States Bureau of the Census

At End of —	TOTAL COTTON EXCLUSIVE OF LINTERS		LINTERS		SEA ISLAND		EGYPTIAN	
	In Consuming Establishments	In Public Storage and at Compresses	In Consuming Establishments	In Public Storage and at Compresses	In Consuming Establishments	In Public Storage and at Compresses	In Consuming Establishments	In Public Storage
July, 1925	866,259	514,196	128,478	28,628	2,703	501	50,475	11,526
June, 1925	1,123,813	759,945	146,673	35,173	2,874	527	59,047	15,426
May, 1925	1,348,304	1,134,920	154,632	45,225	2,932	679	64,131	20,411
April, 1925	1,514,514	1,666,147	162,861	49,663	3,161	677	65,602	25,770
March, 1925	1,644,793	2,237,115	157,872	62,256	3,333	822	71,499	21,509
February, 1925	1,546,210	3,075,140	149,292	69,661	3,242	1,247	63,736	11,192
January, 1925	1,433,814	3,863,475	137,634	58,290	3,588	899	51,944	10,742
December, 1924	1,319,265	4,623,863	118,924	53,017	3,342	1,090	34,907	7,505
November, 1924	1,046,612	4,914,219	95,781	51,804	3,081	1,043	25,002	6,853
October, 1924	730,656	4,224,854	74,405	46,958	2,789	1,160	27,409	6,325
September, 1924	514,537	2,072,956	70,479	38,202	2,667	1,355	36,468	7,025
August, 1924	552,669	810,913	83,334	44,239	2,282	1,432	44,721	9,783
Season ending —								
July, 1924	719,827	673,934	100,632	54,026	2,465	2,038	51,655	12,586
July, 1923	1,093,618	938,903	127,139	36,000	2,947	3,989	86,508	51,316
July, 1922	1,218,388	1,488,165	138,523	54,587	3,787	3,303	62,863	53,427
July, 1921	1,111,147	3,723,213	201,353	234,926	4,489	6,126	68,914	59,148
July, 1920	1,358,147	2,055,015	277,218	382,432	14,654	9,791	117,300	102,799
July, 1919	1,303,418	2,208,367	266,539	227,358	19,487	31,538	36,858	15,899
July, 1918	1,465,223	1,734,965	138,108	236,809	20,000	36,494	35,917	31,363
July, 1917	1,501,916	888,257	112,972	230,687	36,482	19,912	75,250	42,662
July, 1916	1,632,245	1,107,464	100,441	113,106	27,454	10,870	123,406	59,202
July, 1915	1,401,185	1,784,919	198,905	89,881	24,919	4,678	96,828	25,123
August, 1914	675,873	540,944	75,346	29,673	21,028	7,453	52,413	6,205
August, 1913	717,704	467,902	60,454	27,378	19,896	Not available	74,518	1,876



The above chart is based on the table on the following page.

United States Stocks of Cotton in Consuming Establishments, in Public Storage and at Compresses

[American cotton is counted in running bales; foreign cotton, in equivalent 500-pound bales]

Linters are not included

The table below does not include cotton in transit, in private storage or on plantations. It embraces merely the cotton in consuming establishments, in public storage and at compresses, as compiled monthly by the United States Bureau of the Census.

At End of —	1919-20			1920-21			1921-22			1922-23			1923-24			1924-25		
	In Consuming Establishments	In Public Storage and at Compresses	In Consuming Establishments	In Public Storage and at Compresses	In Consuming Establishments	In Public Storage and at Compresses	In Consuming Establishments	In Public Storage and at Compresses	In Consuming Establishments	In Public Storage and at Compresses	In Consuming Establishments	In Public Storage and at Compresses	In Consuming Establishments	In Public Storage and at Compresses	In Consuming Establishments	In Public Storage and at Compresses	In Consuming Establishments	In Public Storage and at Compresses
August	1,133,365	1,816,596	1,126,783	1,964,463	1,006,066	3,463,964	1,024,874	1,530,141	810,511	1,172,287	552,669	810,913	772,632	2,147,012	514,537	2,072,956	730,656	4,224,854
September	1,067,970	2,502,307	901,373	2,797,338	1,118,045	4,312,135	1,065,816	3,217,939	1,106,347	3,485,005	1,016,612	4,914,219	1,444,474	3,769,204	1,016,612	4,914,219	1,319,265	4,623,863
October	1,365,139	3,687,141	940,480	4,132,967	1,398,138	4,984,831	1,381,945	4,287,119	1,637,824	3,512,577	1,433,814	3,863,475	1,637,824	3,512,577	1,433,814	3,863,475	1,546,210	3,075,140
November	1,642,425	4,063,176	1,118,418	5,100,978	1,655,359	5,292,941	1,724,488	4,197,935	1,583,439	2,497,075	1,546,210	3,075,140	1,583,439	2,497,075	1,546,210	3,075,140	1,633,783	2,028,331
December	1,836,703	4,164,208	1,251,122	5,623,646	1,738,138	5,206,663	1,917,231	4,069,470	1,493,266	1,983,544	1,512,086	1,66,147	1,493,266	1,983,544	1,512,086	1,66,147	1,348,304	1,134,920
January	1,952,326	3,758,329	1,263,961	5,645,482	1,668,668	4,621,708	1,988,115	3,485,952	1,328,273	1,512,086	1,512,086	1,66,147	1,328,273	1,512,086	1,512,086	1,66,147	1,123,813	759,945
February	1,869,368	3,530,654	1,327,155	5,503,139	1,595,242	4,214,862	2,020,900	2,803,304	1,157,778	882,204	719,827	514,196	1,583,439	2,497,075	1,546,210	3,075,140	1,633,783	2,028,331
March	1,853,996	3,240,197	1,336,542	5,252,852	1,557,023	3,752,258	2,033,837	2,379,697	1,493,266	1,983,544	1,512,086	1,66,147	1,493,266	1,983,544	1,512,086	1,66,147	1,348,304	1,134,920
April	1,811,527	2,978,158	1,315,706	5,026,894	1,461,340	3,213,483	1,878,198	1,965,719	1,328,273	1,512,086	1,512,086	1,66,147	1,328,273	1,512,086	1,512,086	1,66,147	1,123,813	759,945
May	1,698,833	2,586,868	1,280,723	4,738,267	1,420,428	2,559,451	1,634,167	1,965,719	1,157,778	882,204	719,827	514,196	1,157,778	882,204	719,827	514,196	1,633,783	2,028,331
June	1,554,274	2,301,016	1,203,364	4,300,386	1,330,903	1,953,478	1,347,468	1,227,184	950,625	882,204	719,827	514,196	950,625	882,204	719,827	514,196	1,633,783	2,028,331
July	1,358,147	2,055,015	1,111,147	3,723,213	1,213,388	1,488,165	1,093,618	938,903	719,827	673,934	514,196	1,633,783	719,827	673,934	514,196	1,633,783	2,028,331	2,028,331

Carry-over of Cotton

The term "carry-over" has several meanings. It may refer (1) simply to cotton held in the United States, or (2) American cotton held anywhere in the world, or (3) all kinds of cotton held anywhere in the world. Statistics of carry-over as issued by trade authorities differ widely from each other each year, not only because of the various meanings of the term, as just stated, but also because some authorities count the carry-over in running bales, disregarding the fact that Egyptian bales, for example, weigh approximately 750 pounds and Indian bales only 400, while others compute the quantities of foreign cottons in equivalent 500-pound bales, and some authorities include American linters while others do not.

Following are statistics of the amount of cotton carried over from each season for several years past, as computed, on different bases, by leading authorities.

World Carry-over of American Cotton

The table below was compiled by Henry G. Hester, Secretary of the New Orleans Cotton Exchange. It includes all American cotton held in the American cotton belt, — *i.e.*, at southern mills, at counted and uncounted interior towns, and on plantations, — stocks at northern mills and at the ports of the United States, and stocks at European ports and at European mills. This embraces practically all American cotton held anywhere in the world. The only stocks not included in this table are those in Japan and scattering stocks in the less important manufacturing countries where some American cotton may be found, such as Canada and Mexico. The cotton is counted in running bales, round bales being counted as half bales.

DATE	Including Linters	Exclusive of Linters
July 31, 1925	2,880,000	2,715,000
July 31, 1924	2,319,000	2,089,000
July 31, 1923	2,573,000	2,396,000
July 31, 1922	4,879,000	4,547,000
July 31, 1921	9,364,000	8,699,000
July 31, 1920	6,216,000	5,216,000
July 31, 1919	6,909,000	6,094,000
July 31, 1918	4,422,000	4,018,000
July 31, 1917	4,305,000	3,688,000
July 31, 1916	5,105,000	4,742,000
July 31, 1915	7,701,000	7,551,000
August 31, 1914	4,564,000	4,399,000

Carry-over Stocks of All Cottons in the World

Source: Merchants National Bank of Boston

[American cotton in running bales; foreign cottons in equivalent bales of 478 pounds net weight; American linters not included]

	CARRY-OVER OF ALL COTTONS				
	July 31, 1921	July 31, 1922	July 31, 1923	July 31, 1924	July 31, 1925
In public storage, etc.:					
Farms, etc., in United States	2,062,000	616,000	280,000	160,000	230,000
Public storage in United States . . .	3,724,000	1,488,000	940,000	673,000	507,000
Alexandria	395,000	330,000	204,000	76,000	82,000
Bombay	724,000	492,000	258,000	323,000	255,000
Afloat to Europe . .	483,000	393,000	265,000	303,000	304,000
Ports, etc., in Europe	1,754,000	1,348,000	717,000	834,000	993,000
Elsewhere ¹	1,403,000	824,000	659,000	370,000	954,000
Total	10,545,000	5,491,000	3,323,000	2,739,000	3,325,000
In mills:					
United States . . .	1,111,000	1,218,000	1,091,000	719,000	869,000
Great Britain . . .	358,000	335,000	258,000	214,000	264,000
Continent	836,000	973,000	690,000	846,000	1,109,000
Elsewhere	1,838,000	1,977,000	1,585,000	1,460,000	1,541,000
Total	4,143,000	4,503,000	3,624,000	3,239,000	3,783,000
Grand total . . .	14,688,000	9,994,000	6,947,000	5,978,000	7,108,000

¹ Includes cotton afloat to the Orient, in warehouses and in transit in the Orient and in transit in Europe.

Supply and Distribution of Cotton in the United States for the Twelve Months ending July 31, 1925

[Quantities are given in running bales, except that round bales are counted as half bales and foreign cotton and domestic cotton, reimported, in equivalent 500-pound bales. Linters are not included]

Source: United States Bureau of the Census

SUPPLY		Bales
On hand August 1, 1924, total		1,555,514
In consuming establishments, total	721,589	
In cotton-growing States	340,157	
In all other States	381,432	
In public storage and at compresses	673,925	
In cotton-growing States	526,662	
In all other States	147,263	
Elsewhere (partially estimated) ¹	160,000	
Imports foreign cotton, total	313,328	
Re-exported	9,885	
Net imports		303,443
Ginnings, crop of 1924, total	13,639,399	
Prior to August 1, 1924	21,795	
During cotton year 1924-25		13,617,604
Ginnings, crop of 1925 prior to August 1		161,683
Aggregate supply		15,638,244
DISTRIBUTION		
Exports domestic cotton, total	8,005,228	
Reimported	6,503	
Net exports		7,998,725
Consumed, total		6,193,417
In cotton-growing States	4,220,010	
In all other States	1,973,407	
Burned		26,000
On hand July 31, 1925, total		1,609,848
In consuming establishments, total	865,842	
In cotton-growing States	428,647	
In all other States	437,195	
In public storage and at compresses	514,006	
In cotton-growing States	389,488	
In all other States	124,518	
Elsewhere (partially estimated) ¹	230,000	
Aggregate distribution		15,827,990
Excess of distribution over supply ²		189,746

¹ Includes cotton for export on shipboard but not cleared; cotton coastwise; cotton in transit to ports, interior towns, and mills; cotton on farms, etc.

² Due principally to the inclusion in all distribution items of the "city crop," which consists of rebaled samples and pickings from cotton damaged by fire and weather.

World Supply and Consumption of American Cotton

The tables below, compiled by Henry G. Hester, Secretary of the New Orleans Cotton Exchange, show the world supply and consumption of American cotton, inclusive of linters, season by season since 1914-15. In considering these statistics it should be borne in mind that they relate only to American cotton. They do not include Egyptian, Indian or other foreign growths. The figures of supply at the beginning of each season include mill stocks in the United States and Europe, stocks at counted and uncounted interior towns and on plantations in this country, and stocks at ports in this country and Europe. The statistics on consumption include consumption in this country and abroad. These statistics are in running bales.

Supply and Consumption, including Linters

COTTON SEASON, AUG. 1 TO JULY 31	Supply at Beginning of Season	Crop	Total Supply for Season	Consumption
1914-15	4,564,000	17,004,000	21,568,000	13,834,000
1915-16	7,701,000	12,175,000	19,876,000	14,812,000
1916-17	5,105,000	12,966,000	18,071,000	13,892,000
1917-18	4,305,000	12,424,000	16,729,000	12,282,000
1918-19	4,422,000	13,070,000	17,492,000	10,535,000
1919-20	6,909,000	12,000,000	18,909,000	12,670,000
1920-21	6,216,000	13,750,000	19,966,000	10,330,000
1921-22	9,364,000	8,442,000	17,806,000	12,829,000
1922-23	4,879,000	10,424,000	15,303,000	12,631,000
1923-24	2,573,000	10,985,000	13,558,000	11,241,000
1924-25	2,319,000	14,808,000	17,127,000	14,247,000
1925-26	2,880,000	—	—	—

Stocks of American Cotton at United States Ports July 31

Source: New Orleans Cotton Exchange

	1921	1922	1923	1924	1925
Galveston	242,268	64,735	18,671	41,954	51,572
New Orleans	430,311	76,166	47,595	50,702	49,275
Mobile	12,987	2,901	850	557	1,303
Savannah	132,215	45,987	12,040	8,390	7,572
Charleston	199,414	53,171	23,870	11,933	7,319
Wilmington	26,826	12,374	5,180	1,828	7,082
Brunswick	475	1,000	4	1	—
Norfolk	89,000	34,000	21,000	16,000	20,000
Baltimore	500	1,092	500	500	500
New York	156,441	145,833	42,729	80,759	61,613
Philadelphia	5,263	4,258	3,893	3,363	3,455
Boston	10,300	6,209	4,566	4,569	1,431
Pacific ports	11,766	71	—	1,046	378
Pensacola	—	—	—	116	157
Jacksonville	1,634	1,433	2,614	1,679	8
Texas City	15,245	1,001	4	—	1
Total	1,335,064	450,231	183,516	223,397	211,666

Activity and Normal Operation of American Cotton Industry

Source: United States Bureau of the Census

MONTH	NORMAL DAYS OF OPERATION				PERCENTAGE OF ACTIVITY ON A SINGLE-SHIFT BASIS			
	1924-25	1923-24	1922-23	1921-22	1924-25	1923-24	1922-23	1921-22
August	26	27	27	27	63.0	85.4	91.9	83.8
September	25½	24½	25½	25½	76.4	93.6	94.2	90.6
October	26¾	26¾	25¾	25¾	86.2	95.8	99.2	92.0
November	24½	25¼	25¼	24½	87.8	96.7	106.5	98.2
December	26	25	25	26	90.7	87.0	101.4	92.7
January	26½	26½	26½	25½	97.2	95.5	107.6	96.6
February	23¾	24¾	23¾	23¾	100.5	87.3	109.6	93.5
March	26	26	27	27	100.0	82.4	108.3	89.3
April	25¾	25¾	24¾	24¾	100.2	80.0	109.2	83.5
May	25½	26½	26½	26½	93.8	67.5	107.6	87.8
June	26	25	26	26	89.2	64.6	98.8	91.2
July	26	26	25	25	84.6	60.3	87.4	87.2

Consumption and Stocks of Cotton by Kinds

[Quantities are given in running bales, except that round bales are counted as half bales and foreign cotton in equivalent 500-pound bales. Linters are not included]

Source: United States Bureau of the Census

KIND AND LOCALITY	RAW COTTON CONSUMED DURING YEAR (BALES)				STOCKS HELD IN CONSUMING ESTABLISHMENTS JULY 31 (BALES)			
	1925	1924	1923	1922	1925	1924	1923	1922
United States	6,193,417	5,680,554	6,666,092	5,909,820	865,842	721,589	1,099,556	1,218,388
Domestic:								
Upland	5,894,497	5,312,033	6,250,792	5,554,667	781,080	626,597	967,672	1,102,939
Sea-island	3,970	4,906	6,267	8,967	2,702	2,465	2,947	3,787
American-Egyptian	19,018	35,998	65,235	49,359	2,849	8,988	10,524	20,421
Foreign:								
Egyptian	191,544	223,649	262,331	226,330	50,529	51,655	89,491	62,863
Peruvian	19,561	29,474	22,818	34,776	2,587	3,609	6,332	7,074
Chinese	40,185	51,472	34,529	22,479	16,258	16,250	15,023	10,156
Br. Indian	24,573	21,848	16,357	8,832	9,832	12,001	6,892	4,634
Other	69	1,174	7,763	4,410	5	24	675	6,514

World's Visible Supply of Cotton during Past Five Seasons

[In thousands of running bales. Linters included]

Source: New York Cotton Exchange Statistics

WEEK ENDING —		1920-21		1921-22		1922-23		1923-24		1924-25	
		All Kinds	American	All Kinds	American	All Kinds	American	All Kinds	American	All Kinds	American
August	3	4,833	2,868	6,192	4,024	3,692	1,865	2,039	850	2,148	939
	10	4,654	2,739	6,071	3,930	3,509	1,762	1,939	799	2,072	910
	17	4,555	2,627	5,935	3,830	3,363	1,671	1,917	792	1,931	818
	24	4,489	2,612	5,817	3,753	3,373	1,643	1,940	829	1,875	792
	31	4,428	2,568	5,701	3,659	3,210	1,629	1,978	924	1,881	835
September	7	4,363	2,541	5,665	3,654	3,219	1,689	2,013	1,031	1,963	948
	14	4,386	2,571	5,626	3,657	3,266	1,770	2,134	1,189	2,108	1,134
	21	4,398	2,620	5,674	3,778	3,455	1,996	2,337	1,429	2,362	1,423
October	28	4,508	2,754	5,802	3,940	3,692	2,265	2,550	1,651	2,688	1,737
	5	4,690	2,893	6,005	4,129	3,944	2,566	2,774	1,913	2,932	2,023
	12	4,940	3,087	6,178	4,309	4,263	2,869	2,964	2,139	3,222	2,363
November	19	5,196	3,335	6,240	4,383	4,531	3,135	3,222	2,392	3,609	2,744
	26	5,353	3,513	6,319	4,474	4,827	3,434	3,401	2,601	3,907	3,062
	3	5,654	3,768	6,387	4,556	5,027	3,670	3,617	2,791	4,284	3,419
December	9	5,860	3,964	6,406	4,609	5,087	3,811	3,924	2,926	4,582	3,736
	16	6,017	4,107	6,430	4,632	5,219	3,925	4,064	3,054	4,835	4,022
	23	6,126	4,243	6,445	4,658	5,253	3,973	4,199	3,161	5,082	4,232
January	30	6,243	4,397	6,450	4,638	5,474	4,009	4,353	3,293	5,312	4,463
	7	6,419	4,544	6,417	4,625	5,420	3,957	4,436	3,350	5,541	4,667
	14	6,562	4,678	6,316	4,608	5,368	3,907	4,522	3,398	5,681	4,741
February	21	6,675	4,764	6,407	4,620	5,358	3,839	4,646	3,405	5,901	4,877
	28	6,762	4,805	6,472	4,661	5,441	3,800	4,785	3,435	5,966	4,938
	5	6,797	4,849	6,428	4,587	5,328	3,680	4,853	3,396	6,084	5,022
March	11	6,784	4,840	6,500	4,561	5,316	3,635	4,891	3,341	6,148	4,979
	18	6,843	4,824	6,512	4,466	5,296	3,513	4,871	3,281	6,115	4,927
	25	6,890	4,842	6,520	4,389	5,249	3,433	4,910	3,239	6,139	4,885
April	1	6,836	4,794	6,447	4,273	5,177	3,324	4,782	3,128	6,025	4,785
	8	6,788	4,760	6,405	4,210	4,984	3,181	4,674	3,057	5,908	4,654
	15	6,795	4,713	6,385	4,135	4,876	3,015	4,694	2,983	5,911	4,607
May	22	6,799	4,725	6,256	4,080	4,761	2,890	4,696	2,857	5,836	4,478
	29	6,833	4,707	6,111	3,954	4,734	2,763	4,690	2,790	5,872	4,391
	6	6,869	4,676	5,985	3,907	4,672	2,674	4,617	2,694	5,748	4,281
June	13	6,880	4,627	5,918	3,793	4,614	2,579	4,408	2,551	5,731	4,155
	20	6,802	4,537	5,893	3,728	4,476	2,468	4,316	2,487	5,603	3,992
	27	6,813	4,549	5,842	3,657	4,388	2,359	4,192	2,395	5,434	3,811
July	4	6,771	4,505	5,798	3,613	4,158	2,201	4,059	2,281	5,182	3,592
	11	6,756	4,498	5,780	3,571	4,105	2,095	3,923	2,172	5,119	3,440
	18	6,775	4,494	5,703	3,518	4,035	1,978	3,717	2,079	4,982	3,302
August	25	6,786	4,497	5,613	3,409	3,799	1,900	3,631	1,964	4,907	3,184
	1	6,793	4,518	5,507	3,332	3,615	1,813	3,546	1,882	4,669	2,982
	8	6,840	4,574	5,406	3,262	3,401	1,720	3,432	1,776	4,545	2,825
September	15	6,859	4,592	5,256	3,162	3,313	1,619	3,300	1,655	4,273	2,620
	22	6,780	4,553	5,181	3,095	3,187	1,538	3,158	1,572	4,169	2,441
	29	6,702	4,547	5,127	3,006	3,076	1,447	3,054	1,505	4,003	2,304
October	6	6,654	4,510	5,033	2,939	2,923	1,347	2,929	1,418	3,851	2,171
	13	6,679	4,511	4,834	2,792	2,824	1,286	2,913	1,405	3,651	2,024
	20	6,731	4,510	4,738	2,688	2,748	1,221	2,818	1,354	3,425	1,877
November	27	6,657	4,442	4,592	2,567	2,641	1,145	2,694	1,268	3,151	1,757
	4	6,520	4,353	4,458	2,441	2,502	1,090	2,579	1,200	2,966	1,638
	11	6,417	4,241	4,284	2,318	2,341	1,023	2,444	1,113	2,783	1,489
December	18	6,328	4,166	4,047	2,170	2,256	962	2,370	1,064	2,663	1,390
	25	6,253	4,093	3,855	2,007	2,192	898	2,270	998	2,514	1,283
	31	6,268	4,113	3,793	1,968	2,129	870	2,161	952	2,288	1,125

Consumption of Cotton, per Thousand Spindles, by Countries

[In running bales.]

Source: International Federation of Master Cotton Spinners' and Manufacturers' Associations
Statistics

COUNTRIES	1913	1921	1922	1923	1924	1925
World	156.3	116.1	137.3	141.2	128.0	144.3
Great Britain	76.8	35.9	50.6	48.9	47.8	56.6
France	136.4	78.9	110.8	126.0	113.5	119.0
Germany	157.9	114.1	126.2	111.9	81.9	127.4
Italy	171.7	176.5	175.6	195.9	206.1	210.0
Czechoslovakia . . .	170.5 ¹	72.6	104.0	71.2	120.5	139.4
Spain	179.3	165.0	200.5	194.0	201.8	194.1
Belgium	172.4	133.5	151.2	161.9	170.0	170.5
Switzerland	70.4	53.9	57.5	48.7	66.6	71.1
Poland	312.8	114.5	184.9	189.6	162.5	178.3
Holland	177.1	170.4	175.5	165.5	81.6	166.4
Sweden	215.8	110.6	133.4	148.0	151.4	149.6
Portugal	163.6	251.7	156.0	177.1	180.9	149.1
Finland	156.5	120.7	142.2	133.6	119.5	110.6
Denmark	284.8	116.9	188.2	296.0	262.5	236.7
Norway	154.2	115.1	111.9	112.6	90.9	172.6
India	357.9	331.7	336.7	307.0	260.4	287.0
Japan	690.6	537.1	519.2	535.0	484.3	464.6
U. S. America	183.5	133.9	159.8	177.4	148.5	161.6
Canada	132.7	136.5	149.6	163.9	130.2	122.0
Mexico	226.9	168.1	179.8	177.4	185.7	237.1
Brazil	423.5	378.9	300.7	328.6	222.9	273.3

¹ Including Austria.

Calculated Total World's Cotton Mill Consumption for the Half son, on Basis of Spinners' Returns made

	COUNTRIES	IN THOUSANDS OF ACTUAL BALES (REGARDLESS OF WEIGHT)							
		AMERICAN				EAST INDIAN			
		HALF YEAR ENDING				HALF YEAR ENDING			
		July 31, 1925	Jan. 31, 1925	July 31, 1924	July 31, 1923	July 31, 1925	Jan. 31, 1925	July 31, 1924	July 31, 1923
1	Europe:								
2	Great Britain	1,252	1,092	850	823	97	86	104	68
3	France	430	376	342	390	83	77	92	96
4	Germany	496	420	405	292	108	106	118	87
5	Russia	150	159	131	61	—	—	—	—
6	Italy	346	293	266	274	139	149	178	131
7	Czecho-Slovakia	189	153	147	87	64	53	68	41
8	Spain	132	121	94	94	39	32	74	28
9	Belgium	80	69	60	62	70	75	82	68
10	Switzerland	32	28	25	26	4	5	6	4
11	Poland	85	79	62	74	7	19	16	24
12	Austria	49	36	40	27	24	22	32	23
13	Holland	59	48	14	38	14	13	6	13
14	Sweden	37	42	40	36	1	2	2	2
15	Portugal	28	18	23	25	—	—	—	—
16	Finland	15	13	14	16	—	—	—	—
17	Denmark	8	9	9	11	—	1	1	1
18	Norway	4	5	2	3	—	1	1	—
18	Europe total	3,392	2,961	2,524	2,339	650	641	780	586
19	Asia:								
20	India	6	6	1	5	1,196	1,151	916	1,015
21	Japan	393	296	297	330	727	751	732	877
22	China	40	31	47	37	195	145	191	186
22	Asia total	439	333	345	372	2,118	2,047	1,839	2,078
23	America:								
24	U. S. A.	3,093	2,810	2,428	3,198	15	16	15	13
25	Canada	94	66	72	83	1	—	—	—
26	Mexico	—	—	2	9	—	—	—	—
27	Brazil	—	—	—	—	—	—	—	—
27	America total	3,187	2,876	2,502	3,290	16	16	15	13
28	Sundries	31	37	5	3	5	28	2	1
29	Half year totals	7,049	6,207	5,376	6,004	2,789	2,732	2,636	2,678

Year ending 31st July, 1925, with Previous Figures for Comparison to the International Cotton Federation

IN THOUSANDS OF ACTUAL BALES (REGARDLESS OF WEIGHT)											
EGYPTIAN				SUNDRIES				TOTAL			
HALF YEAR ENDING				HALF YEAR ENDING				HALF YEAR ENDING			
July 31, 1925	Jan. 31, 1925	July 31, 1924	July 31, 1923	July 31, 1925	Jan. 31, 1925	July 31, 1924	July 31, 1923	July 31, 1925	Jan. 31, 1925	July 31, 1924	July 31, 1923
198	233	234	209	125	152	153	164	1,672	1,563	1,341	1,264
48	59	57	47	28	21	29	95	589	533	520	628
31	26	26	18	8	16	9	10	643	568	558	407
20	20	10	1	442	293	162	151	612	472	303	213
28	26	33	24	11	10	9	4	524	478	486	433
10	9	10	6	3	3	1	4	266	218	226	138
7	14	16	17	3	4	8	2	181	171	192	141
1	1	4	2	4	5	3	7	155	150	149	139
19	19	19	16	-	1	1	1	55	53	51	47
3	4	5	3	6	6	8	2	101	108	91	103
1	2	2	2	1	1	1	1	75	61	75	53
-	-	-	-	1	1	-	1	74	62	20	52
1	-	1	1	-	-	-	-	39	44	43	39
-	1	1	2	16	12	16	24	44	31	40	51
-	-	-	-	-	-	-	-	15	13	14	16
-	-	-	-	-	-	-	-	8	10	10	12
-	-	-	-	-	-	-	-	4	6	3	3
367	414	418	348	648	525	400	466	5,057	4,541	4,122	3,739
4	6	1	1	27	44	7	15	1,233	1,207	925	1,036
19	20	21	17	139	114	113	69	1,278	1,181	1,163	1,293
-	-	-	1	609	590	620	515	844	766	858	739
23	26	22	19	775	748	740	599	3,355	3,154	2,946	3,068
71	56	72	103	30	36	28	51	3,209	2,918	2,543	3,365
-	-	-	2	-	-	-	-	95	66	72	85
1	-	1	-	86	106	73	54	87	106	76	63
1	-	-	-	251	281	185	395	252	281	185	395
73	56	73	105	367	423	286	500	3,643	3,371	2,876	3,908
7	4	7	8	28	33	31	32	71	102	45	44
470	500	520	480	1,818	1,729	1,457	1,597	12,126	11,168	9,989	10,759

Calculated Total World's Cotton Mill Stocks on 1st August, 1925, with to the International

[Figures in Italics are

	COUNTRIES	IN THOUSANDS OF ACTUAL BALES (REGARDLESS OF WEIGHT)							
		AMERICAN				EAST INDIAN			
		HALF YEAR ENDING				HALF YEAR ENDING			
		July 31, 1925	Jan. 31, 1925	July 31, 1924	July 31, 1923	July 31, 1925	Jan. 31, 1925	July 31, 1924	July 31, 1923
	Europe:								
1	Great Britain	131	132	83	104	31	9	28	29
2	France	130	126	85	88	53	22	52	50
3	Germany	124	125	65	58	51	20	46	32
4	Russia	82	64	56	26	—	—	—	—
5	Italy	140	111	91	90	91	32	86	57
6	Czecho-Slovakia	44	50	28	18	27	9	27	10
7	Spain	18	23	8	32	7	4	8	3
8	Belgium	29	26	16	17	39	15	32	28
9	Switzerland	17	18	11	11	4	2	6	3
10	Poland	11	17	7	12	4	1	6	6
11	Austria	13	14	9	7	11	4	12	11
12	Holland	20	20	12	10	10	3	8	8
13	Sweden	16	17	16	11	—	1	2	2
14	Portugal	4	5	6	6	—	—	—	—
15	Finland	3	3	4	2	—	—	—	—
16	Denmark	3	2	2	3	1	—	—	—
17	Norway	2	2	1	1	—	—	—	—
18	Europe total	787	755	500	496	329	122	313	239
	Asia:								
19	India	—	3	1	5	578	399	731	717
20	Japan	192	170	158	160	551	165	486	570
21	China	27	28	14	20	127	32	44	88
22	Asia total	219	201	173	185	1,256	596	1,261	1,375
	America:								
23	U. S. A.	787	1,365	636	977	12	8	15	9
24	Canada	31	43	14	24	—	—	—	—
25	Mexico	—	—	—	8	—	—	—	—
26	Brazil	—	—	—	—	—	—	—	—
27	America total	818	1,408	650	1,009	12	8	15	9
28	Sundries	9	5	1	3	2	12	1	—
29	Grand totals	1,833	2,369	1,324	1,693	1,599	738	1,590	1,623

Previous Figures for Comparison on Basis of Spinners' Returns made Cotton Federation

previous half year's figures.]

IN THOUSANDS OF ACTUAL BALES (REGARDLESS OF WEIGHT)											
EGYPTIAN				SUNDRIES				TOTAL			
HALF YEAR ENDING				HALF YEAR ENDING				HALF YEAR ENDING			
July 31, 1925	Jan. 31, 1925	July 31, 1924	July 31, 1923	July 31, 1925	Jan. 31, 1925	July 31, 1924	July 31, 1923	July 31, 1925	Jan. 31, 1925	July 31, 1924	July 31, 1923
52	57	60	69	38	40	34	35	252	238	205	237
25	24	22	23	19	8	9	11	227	180	168	172
11	13	7	5	6	4	6	5	192	162	124	100
11	8	8	5	244	118	96	42	337	190	160	73
12	14	13	12	6	4	5	2	249	161	195	161
3	3	2	2	2	—	1	1	76	62	58	31
3	4	4	1	1	1	1	1	29	32	21	37
1	1	1	1	3	1	2	3	72	43	51	49
7	13	7	11	1	—	1	1	29	33	25	26
2	3	2	2	1	4	3	1	18	25	18	21
1	1	1	1	1	—	—	—	26	19	22	19
—	—	—	—	—	—	—	—	30	23	20	18
—	—	—	1	—	—	—	—	16	18	18	14
—	—	—	—	6	4	6	6	10	9	12	12
—	—	—	—	—	—	—	—	3	3	4	2
—	—	—	—	—	—	—	—	4	2	2	3
—	—	—	—	—	—	—	—	2	2	1	1
128	141	127	133	328	184	164	108	1,572	1,202	1,104	976
—	1	1	1	5	14	4	10	583	417	737	733
16	17	21	21	24	74	40	30	783	426	705	781
—	—	—	—	132	227	124	103	286	287	182	211
16	18	22	22	161	315	168	143	1,652	1,130	1,624	1,725
34	35	34	60	20	12	21	24	853	1,420	706	1,070
—	—	—	1	—	—	—	—	31	43	14	25
—	—	—	1	40	32	7	22	40	32	7	31
—	—	—	—	97	99	99	74	97	99	99	74
34	35	34	62	157	143	127	120	1,021	1,594	826	1,200
3	3	5	3	8	13	8	25	22	33	15	31
181	197	188	220	654	655	467	396	4,267	3,959	3,569	3,932

**Calculated Total World's Cotton Spinning Spindles (000's
1925, on Basis of Returns made to the**

	COUNTRIES	TOTAL ESTIMATED NUMBER OF SPINNING SPINDLES		MULE SPINDLES	
		HALF YEAR ENDING		HALF YEAR ENDING	
		July 31, 1925	Jan. 31, 1925	July 31, 1925	Jan. 31, 1925
	Europe:				
1	Great Britain	57,116	56,710	43,651	43,621
2	France	9,428	9,374	3,893	4,034
3	Germany	9,500	9,500	4,373	4,373
4	Russia	7,246 ¹	7,246	2,898	2,898
5	Italy	4,771	4,635	814	1,201
6	Czecho-Slovakia	3,471	3,459	1,806	1,799
7	Spain	1,813	1,813	621	621
8	Belgium	1,788	1,764	468	458
9	Switzerland	1,517	1,528	804	823
10	Poland	1,172	1,146	359	514
11	Austria	1,038	1,051	457	451
12	Holland	817	727	203	203
13	Sweden	555	564	94	96
14	Portugal	503	503	173	173
15	Finland	253	253	58	58
16	Denmark	78	79	8	6
17	Norway	58	69	13	17
18	Total	101,124	100,421	60,693	61,346
	Asia:				
19	India	8,500	8,313	1,139	1,040
20	Japan	5,292	5,110	26	26
21	China	3,350	3,350	—	—
22	Total	17,142	16,773	1,165	1,066
	America:				
23	U. S. A.	37,937	37,886	2,588	8,588
24	Canada	1,319	1,156	265	330
25	Mexico	814	805	5	—
26	Brazil	1,950	1,720	—	—
27	Total	42,020	41,567	2,858	2,918
28	Sundries	1,077	1,143	108	132
29	Grand totals	161,363	159,904	64,824	65,462

¹ Russia: Of these only 4,203,056 are being worked.² Approximate.

omitted) for the Half Years July 31st, 1925, and January 31st,
International Cotton Federation's Statistics

RING SPINDLES		SPINDLES SPINNING EGYPTIAN COTTON		SPINDLES IN COURSE OF ERECTION		
HALF YEAR ENDING		HALF YEAR ENDING		HALF YEAR ENDING		
July 31, 1925	Jan. 31, 1925	July 31, 1925	Jan. 31, 1925	July 31, 1925	Jan. 31, 1925	
13,465	13,089	18,438	19,529	308	532	1
5,535	5,340	2,200	2,200	64	66	2
5,127	5,127	1,029	1,051	169	80	3
4,348	4,348	300	270	—	—	4
3,957	3,434	432	602	109	171	5
1,665	1,660	417	417	56	29	6
1,192	1,192	155	155	—	—	7
1,320	1,306	21	7	37	23	8
713	705	691	766	2	9	9
813	632	98	187	13	10	10
581	600	67	51	7	7	11
614	524	—	—	40	52	12
461	468	7	6	6	7	13
330	330	9	10	8	—	14
195	195	7	9	—	—	15
70	73	—	—	15	14	16
45	52	—	—	—	—	17
40,431	39,075	23,871	25,260	834	1,000	18
7,361	7,273	13	143	100	158	19
5,266	5,084	433	506	165	157	20
3,350	3,350	—	—	14	13	21
15,977	15,707	446	649	279	328	22
35,349	35,298	2,000	2,000 ²	?	?	23
1,054	826	30	—	—	—	24
809	805	10	25	—	30	25
1,950	1,720	3	—	244	74	26
39,162	38,649	2,043	2,025 ²	244	104	27
969	1,011	103	40	9	23	28
96,539	94,442	26,463	27,974	1,366 ³	1,455 ³	29

³ This figure does not include American spindles, particulars of which are not supplied by the Bureau of the Census.

Exports of Cotton from Alexandria, Egypt

[In cantars of 99.049 pounds each]

Source: Alexandria General Produce Association

WEEK ENDING —		1922-23		1923-24		1924-25	
		Week	Since Sept. 1	Week	Since Sept. 1	Week	Since Sept. 1
September	7	57,112	57,112	51,895	35,277	83,477	19,402
	14	23,116	80,228	64,165	99,442	43,769	63,171
	21	92,015	172,243	72,758	172,200	73,055	136,226
	28	65,662	237,905	86,338	258,538	124,834	261,060
October	5	106,965	344,870	151,956	410,494	176,237	437,297
	12	84,713	429,583	144,080	554,574	98,703	536,000
	19	131,727	561,310	141,166	695,740	172,515	708,515
	26	238,120	799,430	166,872	862,612	168,890	877,405
November	2	151,022	950,452	205,563	1,068,175	212,525	1,089,930
	9	277,667	1,228,119	191,781	1,259,956	351,236	1,441,166
	16	207,299	1,435,418	323,468	1,583,424	258,117	1,699,283
	23	302,919	1,738,337	251,572	1,834,996	273,114	1,972,397
	30	346,760	2,085,097	407,557	2,242,553	250,343	2,222,740
December	7	199,501	2,284,598	463,759	2,706,312	371,226	2,593,966
	14	402,799	2,687,397	251,309	2,957,621	303,786	2,897,752
	21	205,119	2,892,516	210,289	3,167,910	283,692	3,181,444
	28	227,487	3,120,003	251,560	3,419,470	239,206	3,420,650
January	4	167,911	3,287,914	95,990	3,515,460	299,585	3,720,235
	11	229,983	3,517,897	209,608	3,725,068	259,454	3,979,689
	18	200,182	3,718,079	258,276	3,983,344	98,387	4,078,076
	25	257,185	3,975,264	206,750	4,190,094	169,627	4,247,703
February	2	221,590	4,196,854	180,737	4,370,831	231,569	4,479,272
	9	200,602	4,397,456	134,924	4,505,755	204,385	4,683,657
	16	176,907	4,574,363	139,545	4,645,300	132,757	4,816,414
	23	187,891	4,762,254	147,163	4,792,463	173,569	4,989,983
March	2	135,216	4,897,470	159,752	4,952,215	184,006	5,173,989
	9	195,465	5,092,935	82,011	5,034,226	198,411	5,372,400
	16	173,893	5,266,828	195,497	5,229,723	120,606	5,493,006
	23	123,794	5,390,622	59,273	5,288,996	120,122	5,595,128
	30	110,862	5,501,484	37,547	5,326,543	90,773	5,685,901
April	6	122,495	5,623,979	130,386	5,456,929	200,296	5,886,197
	13	166,921	5,790,900	100,921	5,557,850	43,111	5,929,308
	20	83,469	5,874,369	91,472	5,649,322	52,237	5,981,545
	27	126,448	6,000,817	101,642	5,750,964	63,306	6,044,851
May	4	63,912	6,064,729	70,719	5,821,683	73,192	6,118,042
	11	109,954	6,174,683	70,902	5,892,585	102,105	6,220,147
	18	36,973	6,211,656	162,375	6,054,960	105,409	6,325,556
	25	93,758	6,305,414	102,262	6,157,222	39,964	6,365,520
June	1	73,836	6,379,250	84,455	6,241,677	70,105	6,435,625
	8	57,884	6,437,134	58,791	6,300,468	34,649	6,470,274
	15	80,070	6,517,204	98,279	6,398,747	69,741	6,540,015
	22	42,449	6,559,653	76,974	6,475,721	67,176	6,607,191
	29	72,252	6,631,905	65,876	6,541,597	42,233	6,649,424
July	6	80,403	6,712,308	55,906	6,597,503	76,204	6,725,628
	13	68,981	6,781,289	65,570	6,663,073	26,417	6,752,045
	20	53,977	6,835,266	21,796	6,684,869	49,477	6,801,522
	27	31,554	6,866,820	82,621	6,767,490	31,943	6,833,465
August	3	79,021	6,945,841	34,330	6,801,820	56,440	6,889,905
	10	69,894	7,015,735	45,410	6,847,230	45,768	6,935,673
	17	49,542	7,065,277	40,042	6,887,272	36,960	6,972,633
	24	55,901	7,121,178	31,065	6,918,337	41,420	7,014,053
	31 ¹	32,798	7,153,976	37,977	6,956,314	22,308	7,036,361

¹ Adjusted total.

Receipts of Cotton at Alexandria, Egypt

[In cantars of 99.049 pounds each]

Source: Alexandria General Produce Association

WEEK ENDING —		1922-23		1923-24		1924-25	
		Week	Since Sept. 1	Week	Since Sept. 1	Week	Since Sept. 1
September	7	27,913	32,454	50,552	50,552	69,462	40,661
	14	26,627	59,081	61,630	112,182	129,210	169,871
	21	45,919	105,000	95,596	207,778	174,915	344,786
	28	160,992	265,992	196,006	403,784	284,458	629,244
October	5	225,109	491,101	226,326	630,110	301,813	931,057
	12	305,517	796,618	292,585	922,695	235,717	1,166,774
	19	363,697	1,160,315	328,208	1,250,903	363,642	1,530,416
	26	366,646	1,526,961	335,292	1,586,195	303,779	1,834,195
November	2	386,519	1,913,480	381,661	1,967,856	448,536	2,282,731
	9	375,873	2,289,353	330,786	2,298,642	399,991	2,682,722
	16	440,076	2,729,429	439,141	2,737,783	366,715	3,049,437
	23	358,763	3,088,192	471,608	3,209,391	428,384	3,477,821
	30	338,455	3,426,647	419,846	3,629,237	386,398	3,864,219
December	7	294,977	3,721,624	317,478	3,946,715	383,041	4,247,260
	14	228,149	3,949,773	308,320	4,255,035	350,926	4,598,186
	21	196,444	4,146,217	288,173	4,543,208	356,701	4,954,887
	28	216,331	4,362,548	220,854	4,764,062	257,579	5,212,466
January	4	171,688	4,534,236	199,028	4,963,090	211,828	5,424,294
	11	163,179	4,697,415	145,276	5,108,366	215,125	5,639,419
	18	164,174	4,861,589	74,456	5,182,822	152,361	5,791,780
	25	161,325	5,022,914	119,578	5,302,400	168,658	5,960,438
February	2	145,873	5,168,787	106,070	5,408,470	150,504	6,110,942
	9	117,890	5,286,677	106,118	5,514,588	109,961	6,220,633
	16	156,241	5,442,918	110,250	5,624,838	84,922	6,305,555
	23	173,610	5,616,528	130,810	5,755,648	121,721	6,427,276
March	2	135,144	5,751,672	83,221	5,838,869	100,744	6,528,020
	9	128,402	5,880,074	70,500	5,909,369	75,729	6,603,749
	16	112,314	5,992,388	42,852	5,952,221	73,067	6,676,816
	23	67,367	6,059,755	44,779	5,997,000	63,779	6,740,595
	30	65,657	6,125,412	32,648	6,029,648	53,750	6,794,345
April	6	95,721	6,221,133	27,108	6,056,756	74,196	6,868,511
	13	49,366	6,270,499	40,141	6,096,897	36,292	6,904,833
	20	62,228	6,332,727	46,052	6,142,949	22,934	6,927,767
	27	59,909	6,392,636	44,431	6,187,380	15,732	6,943,499
May	4	111,368	6,504,004	42,991	6,230,371	5,774	6,949,273
	11	56,319	6,560,323	28,652	6,259,023	9,406	6,958,678
	18	13,616	6,573,939	22,876	6,281,899	9,425	6,968,104
	25	13,413	6,587,352	27,354	6,309,253	8,532	6,976,636
June	1	3,904	6,591,256	21,726	6,330,979	12,710	6,989,346
	8	5,764	6,597,020	30,111	6,361,090	21,419	7,010,765
	15	2,804	6,599,824	9,229	6,370,319	20,626	7,031,391
	22	8,405	6,608,229	2,378	6,372,697	4,671	7,036,062
	29	5,331	6,613,560	112	6,372,809	541	7,036,603
July	6	6,388	6,619,948	2,220	6,375,029	1,069	7,037,672
	13	7,831	6,627,779	1,969	6,376,998	-	7,037,672
	20	2,098	6,629,877	661	6,377,659	1,140	7,058,812
	27	475	6,630,352	4,073	6,381,732	111	7,038,923
August	3	3,523	6,633,875	1,180	6,382,912	1,855	7,040,778
	10	1,579	6,635,454	445	6,383,357	338	7,041,116
	17	1,742	6,637,195	2,270	6,385,627	898	7,042,014
	24	6,718	6,643,914	10,039	6,395,666	6,285	7,048,299
	31 ¹	15,764	6,659,678	43,451	6,439,117	22,614	7,070,913

¹ Adjusted total.

Stock of Cotton at Alexandria, Egypt

[In cantars of 99.049 pounds each]

Source: Alexandria General Produce Association

WEEK ENDING —	1919-20	1920-21	1921-22	1922-23	1923-24	1924-25
September 7	416,170	410,834	1,752,288	1,369,946	818,275	281,259
14	429,121	439,279	1,783,372	1,310,853	815,740	366,700
21	392,148	484,923	1,699,479	1,264,757	838,578	468,560
28	543,640	536,996	1,706,181	1,360,087	948,246	628,184
October 5	734,951	618,530	1,690,188	1,478,231	1,022,616	753,760
12	944,857	738,784	1,850,409	1,699,035	1,171,121	890,774
19	1,125,446	846,268	1,997,173	1,931,005	1,358,163	1,081,901
26	1,202,826	936,360	2,139,264	2,059,531	1,526,583	1,216,790
November 2	1,327,932	963,525	2,262,407	2,295,028	1,702,681	1,452,801
9	1,390,592	1,056,714	2,187,983	2,393,234	1,841,686	1,501,556
16	1,484,894	1,186,799	2,247,865	2,626,011	1,957,359	1,610,154
23	1,491,481	1,302,608	2,320,074	2,681,855	2,177,395	1,765,424
30	1,504,016	1,365,353	2,423,389	2,673,550	2,189,684	1,901,475
December 7	1,751,843	1,357,205	2,447,501	2,769,026	2,043,403	1,913,294
14	1,740,085	1,352,749	2,305,446	2,594,376	2,100,414	1,960,434
21	1,790,408	1,398,337	2,369,408	2,585,701	2,178,298	2,033,443
28	1,756,071	1,435,382	2,451,920	2,574,545	2,147,592	2,051,816
January 4	1,808,319	1,468,932	2,528,739	2,578,322	2,250,630	1,964,059
11	1,729,456	1,504,476	2,538,750	2,511,518	2,186,298	1,919,730
18	1,596,662	1,550,687	2,503,822	2,475,510	2,002,478	1,973,704
25	1,532,183	1,605,751	2,510,528	2,379,650	1,915,306	1,972,735
February 2	1,386,871	1,608,863	2,488,658	2,303,933	1,840,639	1,891,670
9	1,332,049	1,667,302	2,400,635	2,221,221	1,811,833	1,796,976
16	1,215,424	1,714,975	2,357,626	2,200,555	1,782,538	1,749,141
23	1,154,054	1,777,663	2,351,900	2,186,274	1,766,185	1,697,293
March 2	1,071,368	1,812,806	2,343,107	2,186,202	1,689,654	1,614,031
9	1,068,026	1,758,721	2,293,889	2,119,139	1,678,143	1,491,349
16	1,048,168	1,755,203	2,270,773	2,057,560	1,525,498	1,443,810
23	999,363	1,755,985	2,301,435	2,001,133	1,511,004	1,405,467
30	974,473	1,637,577	2,269,392	1,955,928	1,506,105	1,368,444
April 6	953,775	1,720,170	2,257,656	1,929,154	1,402,827	1,242,344
13	942,706	1,765,910	2,265,683	1,811,599	1,342,047	1,235,525
20	914,838	1,819,519	2,261,160	1,790,358	1,296,627	1,206,222
27	890,083	1,854,747	2,195,380	1,723,819	1,239,416	1,158,648
May 4	876,605	1,893,427	2,209,913	1,771,275	1,211,688	1,091,231
11	847,922	1,906,099	2,197,814	1,717,640	1,169,438	998,532
18	824,051	1,985,836	2,181,152	1,694,283	1,029,939	902,548
25	810,250	2,019,368	2,080,304	1,613,938	955,031	871,116
June 1	788,693	1,994,712	2,012,516	1,544,006	892,032	813,721
8	739,212	2,077,213	1,926,073	1,491,886	863,622	800,491
15	724,981	1,960,186	1,925,655	1,414,620	774,572	751,376
22	710,472	1,989,612	1,883,481	1,380,576	699,976	688,871
29	666,600	2,008,522	1,856,945	1,313,655	634,212	647,179
July 6	646,668	2,024,276	1,820,361	1,239,640	580,526	572,044
13	623,878	2,015,763	1,772,838	1,178,490	516,925	545,627
20	624,837	2,005,346	1,712,204	1,126,611	495,290	497,290
27	601,342	1,991,954	1,668,648	1,095,532	417,242	465,458
August 3	559,740	1,978,955	1,650,501	1,020,034	384,092	410,873
10	545,730	1,978,387	1,560,444	951,719	339,127	365,443
17	531,718	1,960,995	1,524,801	903,919	301,355	329,381
24	519,371	1,947,707	1,464,301	854,736	280,329	294,246
31	520,544	1,967,498	1,399,145	837,702	285,803	294,552

Egyptian Cotton Exports, by Countries of Destination, during Egyptian Cotton Season, from September 1 to August 31

[In running Egyptian bales]

Source: Alexandria General Produce Association

	1914-15	1915-16	1916-17	1917-18	1918-19	1919-20	1920-21	1921-22	1922-23	1923-24	1924-25
Austria . . .	—	—	—	—	—	—	2,331	—	—	—	—
Belgium . . .	—	—	—	—	—	812	223,292	4,235	7,108	7,639	3,299
England . . .	379,451	355,669	346,196	503,597	459,774	345,878	—	353,275	403,045	450,436	424,953
France . . .	27,107	45,812	28,063	44,560	78,487	50,089	40,266	83,198	114,185	137,707	126,464
Germany . . .	—	—	—	—	—	5,874	8,558	16,582	19,092	17,167	14,377
Greece and Turkey .	2,516	40	143	4,891	2,602	926	2,676	2,930 ¹	792 ¹	2,488 ¹	3,286 ¹
Holland . . .	—	—	—	—	—	1,841	2,680	3,443	3,627	7,290	9,799
India and China . .	475	185	—	—	—	—	2,060	1,260	1,627	1,851	434
Italy . . .	167,701	52,516	54,726	50,140	49,328	52,111	77,775	90,257	117,146	137,776	160,710
Japan . . .	18,169	25,801	20,682	18,218	22,160	14,256	18,686	19,753	33,711	26,356	33,080
Portugal . . .	756	801	929	—	250	695	763	650	925	850	823
Russia . . .	7,528	42,619	32,446	—	—	—	—	—	1,450	—	—
Spain . . .	23,204	20,332	12,534	16,911	10,436	8,805	14,671	19,399	29,557	27,508	19,608
United States . . .	174,382	184,544	134,891	75,865	95,262	256,555	51,130	168,136	211,417	109,261	135,200
Other countries . .	31,442	—	—	—	10	15	527	410	1,646	1,000	2,530
Total . . .	832,731	728,319	630,610	714,182	718,309	737,857	445,415	763,528	945,328	927,328	934,563

¹ Greece and Syria.

NOTE. — This table shows only the destination of the cotton as given when the cotton was shipped from Egypt. Some of the cotton was reshipped from these countries of initial destination and was finally consumed in other countries; for example, some of the cotton reported here as taken by Great Britain was reshipped by the latter to the United States.

Great Britain Raw Cotton Trade and Distribution

[000's omitted]

Source: Liverpool Cotton Association

Year	Imports						Exports	Consumption		Stock at End of Season		Year	
	American	Brazilian	Egyptian, etc.	Peruvian, etc.	East Indian	Total		Average Weight of Bales	Total	Average Weight of Bales	Liverpool		Great Britain
1840	1,238	85	38	22	216	1,599	365	120	1,251	367	366	584	1840
1850	1,184	172	79	6	308	1,749	392	272	1,514	388	455	622	1850
1860	2,581	103	109	10	563	3,366	424	608	2,523	429	546	794	1860
1870	1,664	403	220	112	1,063	3,462	380	658	2,797	386	379	547	1870
1880	2,634	123	240	73	570	3,640	434	531	3,068	444	478	681	1880
1890	2,918	150	272	66	604	4,010	467	477	3,500	475	910	1,179	1890
1900-01	3,028	39	389	55	128	3,639	506	375	3,101	506	366	506	1900-01
1910-11	3,399	125	603	127	252	4,506	503	557	3,797	498	402	724	1910-11
1911-12	4,305	78	590	151	106	5,230	507	642	4,261	503	595	1,087	1911-12
1912-13	3,615	202	591	193	136	4,737	506	527	4,345	501	572	994	1912-13
1913-14	3,507	286	570	249	264	4,876	492	437	4,231	491	886	1,225	1913-14
1914-15	4,048	40	559	206	277	5,130	504	605	3,890	496	1,462	1,815	1914-15
1915-16	2,698	5	557	197	154	3,611	513	494	3,971	497	644	962	1915-16
1916-17	2,646	17	442	191	96	3,392	512	204	3,567	505	268	585	1916-17
1917-18	2,276	25	484	143	211	3,139	512	3	2,960	506	251	760	1917-18
1918-19	2,490	13	414	165	84	3,166	510	75	2,929	521	659	900	1918-19
1919-20	3,268	79	623	292	200	4,462	507	449	3,434	503	1,015	1,479	1919-20
1920-21	1,716	15	252	226	93	2,302	505	291	2,080	512	1,085	1,474	1920-21
1921-22	1,811	111	417	309	62	2,710	506	224	2,835	497	787	1,163	1921-22
1922-23	1,355	89	496	299	243	2,462	508	194	2,746	496	399	683	1922-23
1923-24	1,682	58	481	421	326	2,968	500	249	2,741	499	414	651	1923-24
1924-25	2,567	51	462	469	196	3,745	491	236	3,280	491	570	889	1924-25

NOTE. — Through 1890, the import, export, and consumption figures were for year ending December 31; from 1900-01 through 1913-14 the figures are for year ending August 31; commencing with 1914-15 the figures are for year ending July 31.

Indian Exports of Cotton

[Bales of 478 pounds net]

[Fiscal years ending March 31]

Source: Bureau of Foreign and Domestic Commerce

COUNTRY OF DESTINATION	1920-21	1921-22	1922-23	1923-24	1924-25
United Kingdom . . .	80,234	29,905	159,733	241,418	129,994
Germany	168,288	196,176	219,866	201,774	135,661
Netherlands	9,875	4,483	8,036	24,420	303,930
Belgium	203,669	165,723	210,651	216,988	161,775
France	32,138	47,371	105,566	145,801	107,680
Spain	63,999	25,209	53,878	73,130	77,162
Italy	177,915	129,028	201,680	460,507	389,601
Austria	28,539 ¹	27,977	35,545	35,091	6,241
Ceylon	3,206	2,265	4,334	5,331	3,433
Indo-China	7,582	24,687	16,628	22,244	21,699
China	160,744	363,907	415,600	225,571	228,249
Japan	784,747	1,471,078	1,354,496	1,436,451	1,545,547
United States . . .	7,839	7,671	18,243	35,985	26,415
All other	6,692	2,710	4,404	5,677	11,079
Total	1,735,467	2,498,190	2,808,660	3,130,388	2,874,834

¹ Austria-Hungary.

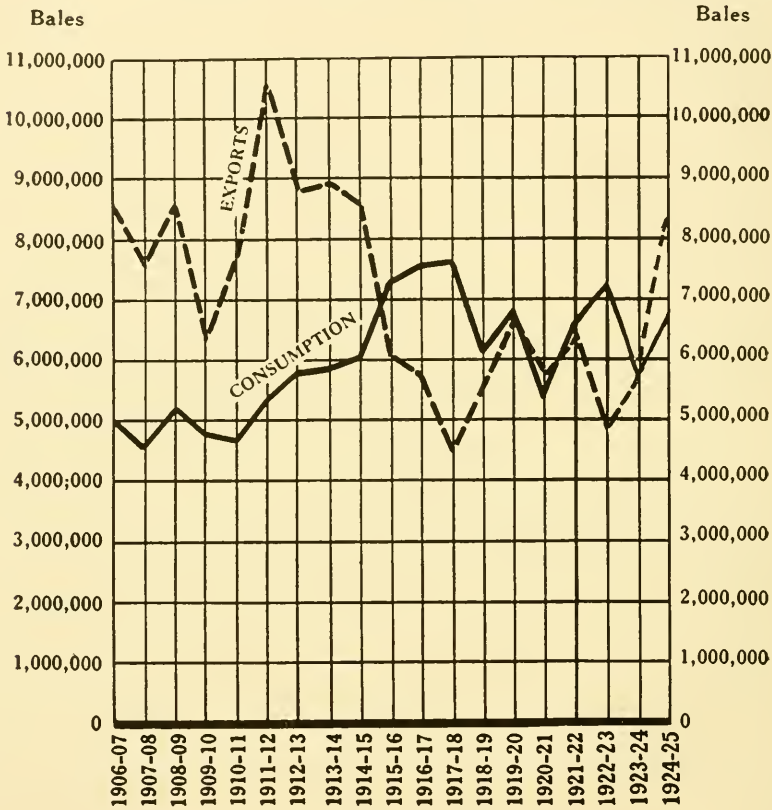
Brazilian Exports of Raw Cotton

[Bales of 478 pounds net]

Source: Bureau of Foreign and Domestic Commerce

COUNTRY OF DESTINATION	Average, 1909-13	1913	1921	1922	1923
Great Britain . . .	63,646	132,120	45,708	78,154	52,267
France	2,771	8,436	13,386	26,464	8,661
Italy	6	—	1,301	—	—
Netherlands	883	3,716	—	—	—
Belgium	1,331	1,536	1,138	—	—
Germany	2,332	4,340	6,900	—	—
Austria-Hungary . .	204	159	—	—	—
Portugal	7,517	14,157	14,499	26,619	20,312
Spain	491	—	—	—	—
Russia (in Europe) .	49	207	—	—	—
United States . . .	73	367	3,485	5,310	5
Argentina	46	—	—	—	—
Uruguay	7	—	—	—	—
All others	—	—	48	13,159	3,295
Total	79,356	165,038	86,465	149,706	84,540

United States Consumption and Exports of Cotton and Linters



The above chart is based on the table on the following page.

United States Production, Consumption, and Exports of Cotton and Linters

The statistics below are in running bales except that round bales are counted as half bales and foreign cotton in equivalent 500-pound bales. The years as given are the official cotton seasons. Through 1913-14 the seasons were from September 1 to August 31. Starting with 1914-15, they have been from August 1 to July 31.

Source: United States Bureau of the Census

COTTON SEASON	Production	Consumption	Exports
1906-07	13,097,992	4,984,936	8,503,265
1907-08	11,527,833	4,539,090	7,573,349
1908-09	13,418,144	5,240,719	8,574,024
1909-10	10,350,978	4,798,953	6,339,028
1910-11	12,384,248	4,704,978	7,781,414
1911-12	16,068,936	5,367,583	10,681,758
1912-13	14,159,078	5,786,330	8,800,966
1913-14	14,290,320	5,884,733	8,914,839
1914-15	16,738,241	6,009,207	8,544,563
1915-16	12,012,813	7,278,529	6,191,110
1916-17	12,664,078	7,658,207	5,739,009
1917-18	12,344,664	7,685,329	4,476,124
1918-19	12,816,716	6,223,837	5,663,920
1919-20	11,920,625	6,762,207	6,598,347
1920-21	13,699,975	5,408,979	5,796,107
1921-22	8,360,153	6,548,853	6,316,121
1922-23	10,319,843	7,312,201	4,864,027
1923-24	10,810,234	6,217,292	5,772,000
1924-25	14,497,361	6,852,265	8,195,876

United States Consumption of Cotton and Linters

[American cotton and linters in running bales. Foreign cotton in equivalent 500-pound bales]

Source: United States Bureau of the Census

PERIOD	Total Cotton (including Linters)	Total Cotton (excluding Linters)	American Cotton (excluding Linters)	Linters	Foreign Cotton	Egyptian	Sea Island	American Egyptian
July, 1925	.	.	.	62,513	23,922	17,865	338	838
June, 1925	.	.	459,976	60,577	24,014	17,824	202	1,108
May, 1925	.	.	469,751	61,187	23,053	16,893	303	1,202
April, 1925	.	.	508,418	59,036	25,448	18,532	342	1,329
March, 1925	.	.	571,656	58,845	24,720	17,965	260	1,532
February, 1925	.	.	557,954	50,598	24,539	17,698	334	2,252
January, 1925	.	.	525,593	51,800	25,647	18,662	376	2,163
December, 1924	.	.	564,078	46,182	22,975	16,491	339	1,297
November, 1924	.	.	509,072	50,960	17,300	10,129	213	1,400
October, 1924	.	.	474,933	55,095	23,072	13,979	375	2,260
September, 1924	.	.	509,557	49,976	21,677	13,527	467	2,262
August, 1924	.	.	413,539	44,296	17,899	11,268	419	2,855
Season ending —			339,556					
July 31, 1925	.	.	6,191,349	651,065	274,390	190,833	3,908	19,252
July 31, 1924	.	.	5,069,527	536,738	310,774	217,913	4,907	35,648
July 31, 1923	.	.	6,066,092	646,109	343,798	262,331	6,267	65,235
July 31, 1922	.	.	5,909,820	639,033	296,827	226,330	8,967	49,359
July 31, 1921	.	.	5,612,993	516,307	215,781	159,196	18,667	16,771
July 31, 1920	.	.	4,892,672	342,473	416,741	323,124	42,971	45,867
July 31, 1919	.	.	6,419,734	457,901	176,116	126,087	51,183	
July 31, 1918	.	.	5,765,936	1,118,840	183,794	136,401	85,939	
July 31, 1917	.	.	6,566,489	869,702	318,261	259,160	94,291	
July 31, 1916	.	.	6,788,505	880,916	316,995	269,324	82,645	
July 31, 1915	.	.	6,080,618	411,845	222,037	181,211	79,394	
August 31, 1914	.	.	5,375,305	307,325	194,309	151,091	81,673	
August 31, 1913	.	.	5,383,099	303,009	232,929	201,269	54,778	
August 31, 1912	.	.	5,250,392	238,237	207,663	180,465	94,856	
August 31, 1911	.	.	4,921,683					Not available
August 31, 1910	.	.	5,129,346					

United States Cotton Consumption, by States ¹

[In running bales, exclusive of linters]

Source: United States Bureau of the Census

	1919-20	1920-21	1921-22	1922-23	1923-24	1924-25
New England States:						
Maine . . .	194,431	153,165	162,142	182,184	148,836	146,379
New Hampshire . . .	294,289	220,241	175,983	235,377	191,816	205,326
Vermont . . .	12,902	10,103	12,470	12,087	9,550	10,129
Massachusetts . . .	1,454,325	922,482	1,140,459	1,231,300	869,695	950,942
Rhode Island . . .	305,240	212,199	215,996	264,132	217,971	230,035
Connecticut . . .	135,939	95,407	115,631	124,500	96,909	95,963
Total New England States . . .	2,397,126	1,613,597	1,822,681	2,049,580	1,534,777	1,636,774
Other non-cotton-growing States:						
New York . . .	233,729	130,793	197,930	201,270	144,017	164,610
New Jersey . . .	37,075	31,364	38,365	41,866	39,088	62,132
Pennsylvania . . .	41,739	24,429	29,747	30,876	30,892	30,687
Maryland . . .	66,364	41,317	41,158	44,799	31,833	37,150
Indiana . . .	14,472	14,212	15,936	15,683	15,711	15,157
Illinois . . .	13,006	10,754	12,418	12,451	13,165	11,783
Others . . .	33,304	28,735	21,808	21,619	12,754	10,762
Total other non-cotton-growing States	439,689	281,604	357,362	368,764	287,460	332,281
Cotton-growing States:						
Virginia . . .	112,747	105,352	116,530	121,272	105,775	110,883
North Carolina . . .	1,149,241	926,384	1,198,163	1,326,174	1,199,859	1,334,794
South Carolina . . .	843,924	771,560	918,725	1,035,557	947,964	1,029,797
Georgia . . .	800,901	614,079	781,870	974,662	864,328	966,324
Alabama . . .	367,468	309,646	377,548	414,880	392,705	430,051
Mississippi . . .	36,425	31,208	40,463	46,117	34,751	32,201
Tennessee . . .	108,373	74,689	107,731	123,052	120,053	115,202
Kentucky . . .	19,093	21,303	22,353	23,915	22,362	21,284
Louisiana . . .	39,543	39,327	40,704	45,135	35,097	33,566
Texas . . .	64,333	62,617	76,606	83,221	79,627	93,494
Others . . .	40,871	41,306	49,084	53,763	55,796	56,766
Total cotton-growing States . . .	3,582,919	2,997,471	3,729,777	4,247,748	3,858,317	4,224,362
Total United States	6,419,734	4,892,672	5,909,820	6,666,092	5,680,554	6,193,417

¹ Statistics here given are for years ending July 31.

United States Cotton Production, Consumption, and Active Cotton Spindles

[Running bales, except those for production in 1850, 1860, and 1870, which are in equivalent 400-pound bales, and those for consumption from 1840 to 1870, and for foreign cotton, which are in equivalent 500-pound bales. Linters are included]

Source: United States Bureau of the Census

YEAR	Cotton produced (Bales) ¹	COTTON CONSUMED (BALES)				ACTIVE COTTON SPINDLES			
		United States	Cotton-growing States	New England States	All Other States	United States	Cotton-growing States	New England States	All Other States
1925	14,497,361	6,852,265	4,459,956	1,675,204	717,105	35,032,246	17,292,042	15,975,442	1,764,762
1924	10,810,234	6,217,292	4,050,844	1,566,784	599,664	35,849,338	16,944,178	17,066,636	1,839,124
1923	10,319,843	7,312,201	4,419,150	1,866,495	956,556	36,260,091	16,310,360	18,053,716	1,895,925
1922	8,360,153	6,548,853	3,977,847	1,853,153	717,853	35,707,738	15,906,165	17,938,805	1,862,768
1921	13,699,975	5,408,979	3,151,954	1,644,834	612,191	36,047,367	15,708,988	18,387,789	1,950,590
1920	11,920,625	6,762,207	3,714,403	2,418,828	628,976	35,480,953	15,230,583	18,287,424	1,962,546
1919	12,816,716	6,223,837	3,491,008	2,231,574	501,255	34,930,934	14,846,239	18,065,857	2,018,838
1918	12,344,664	7,685,329	4,414,052	2,612,934	628,343	34,542,665	14,529,063	17,984,720	2,028,882
1917	12,664,078	7,658,207	4,335,007	2,654,138	669,062	33,888,835	14,155,758	17,760,968	1,972,109
1916	12,012,813	7,278,529	3,977,130	2,627,150	674,249	32,805,883	13,382,065	17,474,264	1,949,554
1915	16,733,241	6,009,207	3,193,353	2,197,220	618,634	31,964,235	12,955,712	17,100,615	1,907,908
1914	14,613,964	5,884,733	3,023,415	2,251,041	610,277	32,107,572	12,711,333	17,408,372	1,987,897
1913	14,090,863	5,786,230	2,960,518	2,210,813	614,999	31,519,766	12,227,226	17,311,451	1,981,089
1912	16,109,349	5,367,583	2,712,223	2,108,360	547,000	30,578,528	11,582,869	17,139,945	1,855,714
1911	11,965,962	4,704,978	2,328,487	1,911,092	465,399	29,522,597	11,084,623	16,510,981	1,926,993
1910	10,386,009	4,793,953	2,292,333	2,016,286	490,234	28,266,862	10,494,112	15,735,086	2,037,664
1909	13,432,131	5,240,719	2,553,797	2,144,448	542,474	28,018,305	10,429,200	15,591,851	1,997,254
1908	11,325,882	4,539,090	2,187,096	1,894,835	457,159	27,505,422	10,200,903	15,329,333	1,975,186
1907	13,305,265	4,984,936	2,410,993	2,073,355	500,588	26,375,191	9,527,964	14,912,517	1,934,710
1906	10,725,602	4,909,279	2,373,577	2,059,900	475,802	25,250,096	8,994,868	14,407,580	1,847,648
1905	13,697,310	4,278,980 ²	2,140,151 ²	1,753,282 ²	385,547 ²	23,687,495	7,631,331	14,202,971	1,833,193
1900	9,507,786	3,873,165	1,523,168	1,909,498	440,499	19,472,232	4,367,688	13,171,377	1,133,167
1890	7,472,511	2,518,409	538,895	1,502,177	477,337	14,384,180	1,570,288	10,934,597	1,879,595
1880	5,755,359	1,570,344 ³	188,748 ³	1,129,498 ³	252,098 ³	10,653,435 ³	561,360 ³	8,632,087 ³	1,459,988 ³
1870	3,011,996	796,616	68,702	551,250	176,664	7,132,415	327,871	5,498,308	1,306,236
1860	5,387,052	845,410	93,553	567,403	184,454	5,235,727	324,052	3,858,962	1,052,713
1850	2,460,093	575,506	78,140	430,603	66,763	3,998,022	264,571	2,958,536	774,915
1840	2,063,915	236,525	71,000	158,708	6,817	2,284,631	180,927	1,597,394	506,310

¹ Relates to crop of preceding year.

² Does not include foreign cotton.

³ Cotton mills only.

United States Imports of Cotton, by Countries of Production

[Equivalent 500-pound bales]

Source: United States Department of Commerce

PERIOD	Egypt	China	Peru	India	Mexico	All Other	Total
Month of —							
July, 1925	2,414	2,828	1,595	3,070	—	20	9,927
June, 1925	10,039	4,542	861	4,294	127	94	19,957
May, 1925	2,717	3,907	600	5,697	954	344	14,219
April, 1925	14,726	3,728	455	2,822	165	513	22,409
March, 1925	19,024	7,567	288	4,545	2,218	313	33,955
February, 1925	41,284	8,380	1,324	1,643	6,283	988	59,902
January, 1925	42,784	1,420	3,335	415	6,274	594	54,822
December, 1924	36,423	—	1,313	1,091	9,507	329	48,663
November, 1924	11,053	192	1,083	383	4,663	175	17,549
October, 1924	3,687	446	1,265	1,340	11,376	21	18,135
September, 1924	4,674	171	563	1,467	2,779	—	9,654
August, 1924	1,488	522	707	1,380	38	1	4,136
Season ending —							
July 31, 1925	190,313	33,703	13,389	28,147	44,384	3,392	313,328
July 31, 1924	164,152	45,118	19,928	34,419	27,062	1,609	292,288
July 31, 1923	329,335	50,239	21,186	22,124	45,679	1,391	469,954
July 31, 1922	233,729	15,563	38,753	10,348	53,637	11,435	363,465
July 31, 1921	87,168	14,722	22,597	8,489	88,155	5,210	226,341
July 31, 1920	485,004	57,185	63,426	14,358	65,343	14,898	700,214
July 31, 1919	100,006	10,871	25,230	2,893	54,434	8,151	201,585
July 31, 1918	114,580	38,964	19,692	7,096	35,726	5,158	221,216
July 31, 1917	199,892	36,063	11,069	3,860	32,858	8,215	291,957
July 31, 1916	350,796	35,792	10,909	4,214	30,098	5,765	437,574
July 31, 1915	252,373	25,631	10,353	7,845	85,180	904	382,286
July 31, 1914	138,579	20,772	12,627	7,849	80,285	876	260,988

United States Exports of Domestic Cotton and Linters, by Countries of Destination

[For fiscal years]

Source: United States Department of Commerce

EXPORTS (EQUIVALENT 500-POUND BALES) TO —

Year	Total Value	Total	United Kingdom	Germany	France	Italy	Spain	Belgium	Russia ¹	Austria ²	Netherlands	All Other Europe	Japan	Canada	Mexico	All Other Countries
1925	\$1,060,980,107	8,439,071	2,623,425	1,891,992	951,473	756,156	289,586	223,741	286,367	371	151,285	157,430	819,581	206,853	81	50,527
1924	963,973,146	5,896,713	1,694,805	1,345,534	751,424	563,733	256,233	108,968	120,318	2,144	112,456	133,233	583,367	131,731	1,082	32,365
1923	685,982,855	5,253,404	1,433,008	1,345,647	704,199	572,008	260,244	183,769	7,274	2,958	75,618	167,046	607,456	217,052	13,492	27,331
1922	596,378,864	6,717,757	1,806,743	1,612,674	820,049	468,590	341,351	186,275	—	4,008	96,203	135,014	895,367	201,166	6,195	133,325
1921	600,185,629	5,622,777	1,786,981	1,132,424	590,630	538,015	260,991	166,018	—	5,862	98,754	155,056	854,592	169,166	70,602	53,381
1920	1,381,707,502	7,087,457	3,444,794	420,758	596,391	617,263	275,034	209,572	—	42,858	186,476	183,729	876,250	216,606	1,141	16,615
1919	873,579,669	2,494,009	2,440,009	—	773,741	537,549	281,343	72,652	310	55,386	57,949	203,949	800,313	203,015	1,707	14,967
1918	655,024,655	4,641,023	3,237,101	—	658,553	369,213	259,194	—	15,945	—	10,098	82,572	583,546	249,973	10,706	14,122
1917	543,074,690	6,176,162	2,895,422	—	1,055,749	687,158	394,003	—	49,189	—	62,161	181,717	530,892	187,201	5,298	121,281
1916	374,186,247	6,168,140	2,760,890	—	890,376	836,915	340,246	—	173,419	—	102,087	169,154	503,077	197,659	23,695	170,592
1915	370,217,972	8,807,157	3,919,749	294,194	692,699	1,127,400	464,504	5,057	82,125	455	544,035	898,096	428,806	182,790	39,727	127,520
1914	610,475,301	9,521,881	3,581,501	2,881,324	1,139,399	537,357	297,339	227,474	99,076	106,511	35,053	63,725	353,440	150,993	34,671	11,018
1913	547,357,185	9,124,591	3,716,898	2,443,886	1,074,087	500,823	317,954	226,967	74,907	113,182	14,537	55,376	396,779	152,015	20,977	13,303
1912	565,849,271	11,070,251	4,313,108	3,156,171	1,228,294	636,077	313,500	211,903	112,262	125,564	35,242	83,821	480,931	181,667	16,129	145,579
1911	583,318,869	8,067,882	3,461,054	2,202,707	1,021,998	436,296	242,073	150,225	81,941	79,530	18,124	48,713	156,724	156,821	4,631	4,042
1910	450,447,243	6,413,416	2,444,558	1,887,657	968,422	393,327	178,455	102,346	67,203	57,220	18,823	43,378	95,000	125,592	29,604	1,831
1909	417,390,655	8,895,970	3,665,355	2,438,090	1,098,173	565,695	301,789	157,631	96,675	94,782	30,129	58,174	208,913	131,453	42,575	6,506
1908	437,788,292	7,633,997	2,956,352	2,385,663	889,083	418,921	292,744	119,470	98,371	90,049	27,684	62,125	200,396	113,997	4,767	4,375
1907	481,277,797	9,036,434	3,966,119	2,315,651	1,006,633	567,916	275,887	151,168	121,141	113,630	29,082	65,083	262,583	150,343	732	7,775
1906	401,005,921	7,268,090	3,181,143	1,871,441	817,583	486,607	241,747	114,673	112,480	56,375	18,490	44,486	147,369	141,908	29,285	4,603
1905	379,965,014	8,690,698	3,967,254	2,011,679	818,304	534,735	295,537	145,561	129,060	62,572	31,163	72,911	336,575	115,857	79,082	9,405
1904	370,811,246	6,126,386	2,756,752	1,707,354	734,286	363,295	184,862	105,213	168,506	28,158	16,055	61,488	45,870	88,795	56,172	580
1903	316,180,429	7,086,086	2,479,066	1,915,094	806,673	444,950	266,336	157,351	181,938	39,912	42,542	82,343	152,826	127,610	66,507	2,978
1902	290,651,819	7,001,538	3,132,324	1,705,815	775,323	445,437	270,602	132,232	73,446	39,757	27,418	61,679	178,505	129,016	27,500	7,051
1901	313,673,443	6,661,781	3,106,857	1,629,935	754,929	365,359	237,346	154,682	53,171	37,238	53,180	52,325	78,558	102,980	35,103	718
1900	241,832,737	6,201,166	2,302,128	1,619,173	736,092	443,951	246,612	148,319	54,950	44,919	74,635	65,635	322,202	109,982	18,522	13,015
1899	209,564,774	3,609,444	1,728,975	1,298,975	803,106	417,353	248,635	129,524	95,012	57,127	55,621	81,500	182,202	98,230	36,130	4,130
1898	230,442,215	7,700,529	3,532,101	1,858,525	812,038	367,581	263,698	161,941	103,825	33,614	43,509	69,189	224,214	123,446	42,433	13,416
1897	230,890,571	6,207,510	3,127,186	1,371,577	716,025	323,117	219,688	83,485	81,570	23,971	34,791	48,790	61,022	80,408	30,207	333
1896	190,056,460	4,670,453	2,267,222	1,093,457	478,265	261,644	216,178	87,966	91,622	15,912	14,219	51,367	40,388	68,074	38,817	322
1895	204,900,280	7,034,866	3,570,782	1,594,631	790,699	332,666	255,679	145,340	141,998	24,852	25,999	55,319	35,319	105,531	75,553	291
1894	204,860,289	5,366,565	2,970,963	990,389	610,851	221,716	225,364	128,907	140,968	960	39,686	9,603	6,003	65,083	35,165	270
1893	188,771,445	4,424,236	2,363,176	850,387	568,059	160,019	200,212	90,399	36,356	—	26,614	22,449	1,586	62,988	41,812	173

¹ Includes Finland and Poland prior to 1919.² Includes Czechoslovakia and Hungary prior to 1920.

United States Exports of Cotton, by Ports

[In running bales, including linters]

Source: New York Cotton Exchange

	1912-13 ¹	1920-21	1921-22	1922-23	1923-24	1924-25
Galveston . . .	3,216,704	2,691,473	2,494,504	1,929,111	2,080,874	2,854,503
New Orleans . . .	1,350,327	1,034,310	1,320,016	814,017	945,227	1,379,102
Mobile . . .	143,148	72,366	122,619	59,099	22,676	80,789
Savannah . . .	836,187	560,698	692,375	293,496	343,241	480,783
Charleston . . .	228,478	54,615	176,021	89,732	157,405	243,983
Wilmington . . .	317,831	97,251	107,175	98,900	95,050	108,213
Norfolk . . .	72,692	111,664	238,027	174,320	219,631	252,226
Baltimore . . .	84,512	5,911	7,759	2,369	3,259	397
New York . . .	615,418	92,080	202,776	302,169	542,951	505,510
Boston . . .	159,589	13,450	16,704	13,552	18,555	14,325
Philadelphia . . .	62,222	3,605	4,279	1,977	2,917	7,490
Newport News . . .	291	—	—	—	19	—
Brunswick . . .	211,819	11,830	29,480	28,477	50	—
Pensacola, etc. . .	125,099	9,993	10,821	9,245	11,950	8,490
Port Arthur . . .	138,642	2,198	—	—	—	—
Port Townsend . . .	104,506	176,567	90,959	9,632	47,134	84,111
San Pedro, etc. . .	—	70,461	61,186	18,869	30,248	78,970
San Francisco . . .	262,917	94,944	61,298	69,112	77,986	111,970
Portland, Ore. . .	4,046	3,625	1,150	—	—	—
Nogales . . .	325	1,950	—	200	—	—
Texas City, etc. . .	698,228	24,450	5,242	3,765	1,754	16,794
Eagle Pass . . .	—	37,171	651	3,534	274	13
El Paso . . .	—	3,252	47	2,850	57	53
Houston . . .	—	466,185	478,131	719,942	1,065,612	1,821,828
Portland, Me. . .	507	—	—	199,053	145,656	200,051
Jacksonville . . .	—	3,015	1,300	675	2,254	1,858
Georgetown . . .	—	—	—	—	—	—
Total . . .	8,633,488	5,643,064	6,122,520	4,844,096	5,814,780	8,251,459

¹ Year ending August 31, 1913; other years end July 31.

World's Takings of American Cotton during Past Five Seasons

[In thousands of running bales. Linters included]

Source: New York Cotton Exchange Statistics

WEEK ENDING —		1920-21		1921-22		1922-23		1923-24		1924-25	
		Week	Season	Week	Season	Week	Season	Week	Season	Week	Season
August	3	152	152	181	181	154	154	51	51	18	18
	10	167	319	210	391	199	353	111	162	82	100
	17	179	497	233	624	184	537	97	259	155	255
	24	94	591	218	841	143	680	96	355	105	360
September	31	136	727	283	1,124	201	881	114	469	135	495
	7	139	866	217	1,340	191	1,072	164	633	155	650
	14	123	989	243	1,583	243	1,315	159	792	178	828
	21	156	1,145	215	1,798	214	1,529	184	976	193	1,021
October	28	155	1,300	257	2,055	238	1,767	235	1,211	201	1,222
	5	162	1,462	311	2,366	297	2,064	302	1,513	304	1,526
	12	157	1,619	341	2,707	293	2,358	354	1,867	306	1,832
	19	173	1,792	408	3,115	405	2,763	361	2,228	359	2,191
November	26	258	2,050	373	3,487	326	3,088	388	2,616	367	2,558
	2	200	2,250	366	3,853	372	3,461	327	2,943	365	2,923
	9	231	2,481	339	4,192	405	3,866	341	3,284	348	3,271
	16	248	2,729	361	4,553	408	4,274	384	3,668	398	3,669
December	23	260	2,988	278	4,831	399	4,673	394	4,062	511	4,180
	30	225	3,213	325	5,156	325	4,998	358	4,420	429	4,609
	7	193	3,406	287	5,443	389	5,387	331	4,751	425	5,034
	14	176	3,582	263	5,705	348	5,735	320	5,071	419	5,453
January	21	214	3,796	251	5,957	318	6,053	294	5,365	367	5,820
	28	252	4,048	204	6,161	296	6,349	272	5,637	348	6,168
	4	206	4,255	258	6,419	352	6,701	258	5,895	338	6,506
	11	244	4,498	210	6,629	269	6,970	289	6,184	409	6,915
February	18	270	4,769	284	6,913	311	7,281	289	6,473	423	7,338
	25	236	5,005	238	7,151	250	7,531	239	6,712	309	7,647
	1	310	5,315	260	7,411	261	7,792	295	7,007	357	8,004
	8	259	5,574	213	7,624	259	8,051	232	7,239	396	8,400
March	15	273	5,846	218	7,842	270	8,321	226	7,465	344	8,744
	22	202	6,049	190	8,032	246	8,567	214	7,679	386	9,130
	29	190	6,238	268	8,299	250	8,818	200	7,879	320	9,450
	7	224	6,462	185	8,484	217	9,035	176	8,055	350	9,800
April	14	218	6,680	269	8,753	220	9,255	223	8,278	350	10,150
	21	241	6,921	214	8,966	236	9,491	155	8,433	378	10,528
	28	158	7,079	224	9,190	216	9,707	173	8,606	356	10,884
	4	214	7,293	178	9,368	227	9,934	192	8,798	320	11,204
May	11	152	7,445	183	9,551	168	10,102	192	8,990	247	11,451
	18	175	7,620	177	9,728	181	10,283	177	9,167	220	11,671
	25	162	7,782	233	9,961	155	10,438	193	9,360	214	11,885
	2	183	7,965	234	10,195	158	10,596	160	9,520	283	12,168
June	9	184	8,149	228	10,423	158	10,754	178	9,698	242	12,410
	16	193	8,342	243	10,666	151	10,905	194	9,892	265	12,675
	23	237	8,580	220	10,886	137	11,042	157	10,049	237	12,912
	30	172	8,751	213	11,099	141	11,183	137	10,186	203	13,115
July	6	206	8,958	193	11,292	149	11,332	141	10,327	198	13,313
	13	149	9,107	250	11,542	117	11,449	54	10,381	203	13,516
	20	172	9,279	213	11,755	124	11,573	100	10,481	194	13,710
	27	198	9,477	221	11,976	135	11,708	129	10,610	165	13,875
August	4	185	9,662	211	12,187	103	11,811	114	10,724	150	14,025
	11	210	9,873	197	12,384	109	11,920	128	10,852	180	14,205
	18	200	10,073	220	12,604	96	12,016	94	10,946	157	14,362
	25	195	10,268	190	12,794	106	12,122	113	11,059	171	14,533
	31	54	10,323	95	12,889	67	12,189	85	11,144	236	14,769

American (including Canadian) Takings of American Cotton during Past Five Seasons

[In thousands of running bales. Linters included]

Source: New York Cotton Exchange Statistics

WEEK ENDING —		1920-21		1921-22		1922-23		1923-24		1924-25	
		Week	Season	Week	Season	Week	Season	Week	Season	Week	Season
August	3	32	32	73	73	60	60	31	31	8	8
	10	48	80	77	150	91	151	46	77	43	51
	17	49	130	81	230	68	219	43	120	41	92
	24	51	181	99	329	66	285	36	156	60	152
	31	46	227	124	453	111	396	48	204	52	204
September	7	48	275	117	570	99	495	101	305	88	292
	14	49	324	112	682	131	626	105	410	86	378
	21	53	377	114	796	123	749	118	528	118	496
	28	84	461	140	935	127	876	128	656	118	614
October	5	80	540	201	1,136	197	1,073	184	840	161	775
	12	97	638	211	1,347	204	1,277	199	1,039	167	942
	19	101	739	237	1,583	256	1,533	249	1,288	188	1,130
	26	138	877	235	1,817	268	1,801	243	1,531	199	1,329
November	2	143	1,020	228	2,046	233	2,034	193	1,724	230	1,559
	9	128	1,148	206	2,252	244	2,278	210	1,934	194	1,753
	16	133	1,281	188	2,439	258	2,536	236	2,170	227	1,980
	23	129	1,410	165	2,604	259	2,795	240	2,410	233	2,213
	30	104	1,514	170	2,773	228	3,023	248	2,658	256	2,469
December	7	97	1,611	144	2,917	249	3,272	180	2,838	229	2,698
	14	92	1,703	131	3,049	218	3,490	169	3,007	208	2,906
	21	109	1,812	119	3,167	195	3,685	181	3,188	191	3,097
	28	100	1,912	118	3,285	173	3,858	147	3,335	165	3,262
January	4	107	2,019	128	3,413	197	4,055	132	3,467	193	3,455
	11	110	2,129	127	3,540	202	4,257	156	3,623	188	3,643
	18	114	2,244	120	3,660	169	4,426	142	3,765	207	3,850
	25	114	2,358	121	3,782	141	4,567	130	3,895	156	4,006
February	1	140	2,498	128	3,910	125	4,692	134	4,029	161	4,167
	8	129	2,627	119	4,029	116	4,808	132	4,161	190	4,357
	15	138	2,765	101	4,130	144	4,952	118	4,279	169	4,526
	22	119	2,884	103	4,234	133	5,085	97	4,376	171	4,697
	29	108	2,992	112	4,346	121	5,206	96	4,472	159	4,856
March	7	113	3,105	108	4,454	115	5,321	82	4,554	173	5,029
	14	96	3,201	103	4,557	99	5,420	83	4,637	165	5,194
	21	108	3,309	87	4,645	99	5,519	83	4,720	170	5,364
	28	84	3,393	101	4,746	98	5,617	79	4,799	171	5,535
April	4	83	3,476	85	4,831	107	5,724	83	4,882	118	5,653
	11	78	3,554	81	4,912	81	5,805	64	4,946	100	5,753
	18	86	3,640	82	4,994	95	5,900	67	5,013	109	5,862
	25	85	3,725	75	5,069	90	5,990	68	5,081	95	5,957
May	2	109	3,834	132	5,201	109	6,099	62	5,143	105	6,062
	9	107	3,941	110	5,311	94	6,193	60	5,203	100	6,162
	16	104	4,045	110	5,421	68	6,261	57	5,260	85	6,247
	23	114	4,159	110	5,531	60	6,321	56	5,316	79	6,326
	30	97	4,256	87	5,618	51	6,372	46	5,362	74	6,400
June	6	98	4,354	87	5,705	51	6,423	29	5,391	75	6,475
	13	98	4,453	81	5,786	57	6,480	28	5,419	74	6,549
	20	95	4,548	82	5,868	61	6,541	28	5,447	64	6,613
	27	83	4,631	90	5,958	50	6,591	31	5,478	59	6,672
July	4	69	4,700	74	6,032	58	6,649	35	5,513	45	6,717
	11	67	4,767	75	6,107	53	6,702	31	5,544	38	6,755
	18	71	4,838	80	6,187	52	6,754	30	5,574	53	6,808
	25	76	4,914	56	6,243	52	6,806	31	5,605	63	6,871
	31	—	4,937	55	6,298	12	6,818	20	5,625	71	6,942

Movement of American Crop into Sight during Past Five Seasons

[In thousands of running bales. Linters included]

Source: New York Cotton Exchange Statistics

WEEK ENDING —	1920-21		1921-22		1922-23		1923-24		1924-25	
	Week	Season	Week	Season	Week	Season	Week	Season	Week	Season
August	3 .	76	76	92	51	51	31	31	6	6
	10 .	37	114	116	96	147	61	92	52	58
	17 .	66	180	132	93	240	89	181	64	122
	24 .	79	259	141	115	355	133	314	79	201
	31 .	92	351	188	186	541	209	523	177	378
September	7 .	112	463	212	251	792	271	794	268	646
	14 .	153	616	246	325	1,117	317	1,111	365	1,011
	21 .	205	821	335	440	1,557	424	1,535	481	1,492
	28 .	288	1,110	420	508	2,065	456	1,991	516	2,008
October	5 .	302	1,411	500	598	2,663	565	2,556	588	2,596
	12 .	350	1,762	520	596	3,259	580	3,136	647	3,243
	19 .	421	2,183	483	671	3,930	614	3,750	741	3,984
	26 .	436	2,619	463	626	4,556	597	4,347	685	4,669
November	2 .	455	3,074	448	608	5,164	518	4,865	723	5,392
	9 .	427	3,501	393	546	5,710	475	5,340	664	6,056
	16 .	391	3,892	388	522	6,232	512	5,825	684	6,740
	23 .	395	4,287	304	447	6,679	501	6,353	720	7,460
	30 .	379	4,666	305	361	7,040	491	6,844	660	8,120
December	7 .	340	5,006	274	338	7,378	387	7,231	629	8,749
	14 .	309	5,316	250	297	7,675	368	7,599	493	9,242
	21 .	301	5,617	264	250	7,925	301	7,900	506	9,748
	28 .	293	5,910	245	257	8,182	302	8,202	406	10,154
January	4 .	250	6,160	184	231	8,413	219	8,421	422	10,576
	11 .	236	6,396	184	224	8,637	234	8,655	366	10,942
	18 .	254	6,650	189	189	8,826	230	8,885	378	11,313 ¹
	25 .	254	6,904	160	170	8,995	195	9,080	268	11,581
February	1 .	262	7,166	144	152	9,148	185	9,265	258	11,839
	8 .	225	7,391	151	116	9,263	161	9,426	263	12,102
	15 .	226	7,616	143	105	9,369	152	9,578	297	12,399
	22 .	215	7,831	134	121	9,489	118	9,696	257	12,656
	29 .	171	8,002	141	123	9,612	103	9,799	233	12,889
March	7 .	192	8,195	138	129	9,741	80	9,879	240	13,129
	14 .	169	8,363	155	126	9,867	81	9,960	224	13,353
	21 .	151	8,515	149	125	9,992	90	10,050	215	13,568
	28 .	170	8,685	153	107	10,099	81	10,131	176	13,744
April	4 .	180	8,856	133	68	10,167	78	10,209	100	13,844
	11 .	144	8,999	141	62	10,229	84	10,293	95	13,939
	18 .	171	9,171	125	65	10,294	83	10,376	83	14,022
	25 .	165	9,336	124	77	10,371	78	10,454	94	14,116
May	2 .	204	9,540	157	71	10,442	78	10,532	82	14,198
	9 .	241	9,780	158	65	10,506	72	10,604	85	14,283
	16 .	211	9,991	143	50	10,556	73	10,677	60	14,343
	23 .	199	10,190	153	55	10,611	74	10,751	59	14,402
	30 .	165	10,355	124	50	10,661	70	10,821	65	14,467
June	6 .	170	10,525	126	50	10,711	55	10,876	66	14,533
	13 .	150	10,675	103	56	10,767	40	10,916	54	14,587
	20 .	171	10,846	109	59	10,827	49	10,965	48	14,635
	27 .	131	10,977	100	59	10,886	43	11,008	46	14,681
July	4 .	96	11,073	85	48	10,934	46	11,054	30	14,711
	11 .	98	11,171	74	42	10,976	41	11,095	31	14,742
	18 .	125	11,296	71	35	11,011	45	11,140	58	14,800
	25 .	128	11,423	26	42	11,053	46	11,186	64	14,864
	31 .	74	11,497	57	39	11,091	40	11,226	78	14,942

¹ 7,000 bales burned.

Monthly Movement of Cotton into Sight

[Running bales, linters included]

Source: New York Cotton Exchange

	1921-22	1922-23	1923-24	1924-25
August	558,369	444,343	523,137	421,375
September	1,324,363	1,676,461	1,543,717	1,934,838
October	2,100,838	2,698,384	2,638,665	3,035,433
November	1,550,411	2,096,038	2,138,035	2,853,939
December	1,204,903	1,274,932	1,445,279	2,261,434
January	750,453	847,799	935,395	1,377,691
February	577,339	519,094	574,369	1,046,591
March	677,996	560,223	369,007	891,552
April	542,227	287,827	355,314	399,238
May	655,164	248,224	310,818	263,397
June	498,604	238,422	207,107	221,987
July	314,138	199,974	190,342	240,903
	10,754,805	11,091,721	11,226,185	14,948,278
Burned	10,000 ¹	564 ¹	—	6,604
Total into sight	10,744,805	11,091,157	11,226,185	14,941,674
Add	751,626 ²	91,240 ²	96,016 ²	21,259 ²
Deduct	—	—	—	—
Total crop	11,496,431	11,182,397	11,322,201	14,962,933

¹ Burned at interior towns.

² Decrease of stock at interior towns under previous year.

Growth of the Cotton Manufacturing Industry of the United States

	1889	1899	1904	1909	1914	1919	1921	1923
Invested capital	\$354,020,843	\$467,240,157	\$613,110,655	\$822,237,529	\$899,764,682	\$1,914,919,506	Not collected	Not collected
Number of active producing spindles .	14,188,103	19,050,952	23,195,143	27,425,608	30,915,489	33,795,081	36,047,367 ¹	36,260,001 ¹
Number of concerns	905	1,005	1,154	1,324	1,328	1,496	1,527	1,643
Number of employees	218,876	302,861	315,874	378,880	393,404	446,852	425,817	497,378
Value of product calendar year . . .	\$267,981,724	\$339,200,320	\$450,407,704	\$628,391,813	\$701,300,933	\$2,195,565,881	\$1,330,263,117	\$2,010,141,147
Consumption of raw cotton and linters (in 500-pound bales).	Cotton year, 1889-90 2,518,409	Cotton year, 1899-1900 3,687,253	Cotton year, 1904-05 4,523,208	Cotton year, 1909-10 4,759,364	Cotton year, 1914-15 6,087,338	Cotton year, 1919-20 6,807,817	Cotton year, 1920-21 5,408,979	Cotton year, 1922-23 7,312,201
Value of total exports of cotton manu- factures, year ending June 30.	\$10,212,644	\$23,566,914	\$22,403,713	\$31,878,566	\$51,467,233	\$232,206,566	\$240,359,362	\$145,360,208
Value of total imports of cotton manu- factures, year ending June 30.	26,805,942	32,054,434	49,524,246	63,231,968	70,704,828	34,762,723	97,550,315	154,015,933

¹ Total active cotton-producing spindles whether in cotton manufacturing industry or not.

Summary of the Cotton Manufactures Industry for New England, Census of Manufactures, 1923

Source: United States Bureau of the Census, Department of Commerce

	Maine ¹	New Hampshire	Vermont	Massachusetts	Rhode Island	Connecticut	Total
Number of establishments	16	23	4	245	153	69	510
Persons engaged	13,998	19,502	1,098	119,448	40,780	19,705	214,531
Proprietors and firm members	—	8	—	34	41	18	101
Salaried employees	188	690	42	2,663	1,255	907	5,745
Wage earners (average number)	13,810	18,804	1,056	116,751	39,484	18,780	208,685
Salaries and wages	\$14,608,221	\$19,100,809	\$1,179,095	\$126,689,318	\$46,464,509	\$21,578,558	\$229,620,510
Salaries	632,351	1,613,915	98,704	8,644,424	4,071,329	2,313,757	17,374,480
Wages	13,975,870	17,486,894	1,080,391	118,044,894	42,393,180	19,264,801	212,246,030
Paid for contract work	289,101	65,599	2,930	3,712,206	779,270	272,965	5,122,071
Cost of materials	28,255,722	40,156,576	2,070,340	230,754,283	74,320,017	40,856,559	416,413,497
Value of product	46,702,017	67,182,864	3,912,997	429,326,215	150,498,370	77,586,629	775,209,092
Value added by manufacture ²	18,446,295	27,026,288	1,842,657	198,571,932	76,178,353	36,730,070	358,795,595

¹ Excludes statistics for one establishment to avoid disclosure of its operations.

² Value of products less cost of materials.

United States Production of the Principal Cotton Piece Goods; and Yarns for Sale, 1923, 1921, and 1919

Source: United States Bureau of the Census

Quantity for leading States that can be shown separately without disclosing the operations of individual establishments.

	1923	1921	1919
	Square Yards	Square Yards	Square Yards
Woven goods (over 12 inches in width)	8,264,219,579	6,703,835,942	6,317,398,000
Sheetings	1,695,520,069	1,600,999,000	1,368,946,000
South Carolina	549,849,047	552,384,046	472,867,617
Georgia	271,562,614	258,108,831	238,851,455
North Carolina	184,051,205	141,612,847	156,590,868
Massachusetts	136,433,893	137,893,022	81,367,563
Print cloth	1,578,196,293	1,157,680,000	997,485,000
South Carolina	830,088,788	557,114,622	450,997,849
Massachusetts	459,296,360	393,409,673	373,938,032
North Carolina	119,174,230	97,450,230	70,360,345
Lawns, nainsooks, cambrics, and similar muslins	367,209,215	392,203,000	417,893,000
Massachusetts	157,246,005	188,804,824	243,580,824
Connecticut	51,613,296	58,187,624	52,612,464
North Carolina	49,340,482	— ¹	— ¹
Rhode Island	45,503,946	53,672,221	65,681,875
Ginghams	571,664,554	536,609,000	368,308,000
North Carolina	163,296,966	122,719,438	105,680,259
Massachusetts	136,695,791	137,880,098	102,297,902
South Carolina	37,491,030	37,379,682	36,447,592
Shirtings (not silk-striped)	254,129,726	249,306,000	318,264,000
North Carolina	61,350,157	56,104,065	63,223,540
Massachusetts	44,733,481	74,369,085	92,952,726
South Carolina	37,199,662	54,278,007	42,097,575
Shirtings (silk-striped)	78,685,447	51,413,734	33,865,803
Massachusetts	32,709,440	47,316,736	27,974,838
South Carolina	24,997,273	— ¹	— ¹
Rhode Island	12,398,212	— ¹	— ¹
Cloth of cotton and silk or other vegetable fibre and silk (except silk-striped shirtings)	150,848,235	36,558,908	51,404,771
Massachusetts	103,099,673	16,730,079	21,143,714
Rhode Island	17,627,283	— ¹	— ¹
Pennsylvania	7,870,519	— ¹	— ¹
Drills	303,420,862	191,715,000	314,822,000
Georgia	116,119,981	54,468,304	86,226,872
South Carolina	75,103,202	63,916,287	96,339,969
Alabama	54,143,523	21,593,014	— ¹

¹ Not reported separately.

United States Production of the Principal Cotton Piece Goods; and Yarns for Sale, 1923, 1921, and 1919 — (Concluded)

Source: United States Bureau of the Census

Quantity for leading States that can be shown separately without disclosing the operations of individual establishments.

	1923	1921	1919
	Square Yards	Square Yards	Square Yards
Cotton flannel (canton flannel, flannel-ettes, and blanketings)	381,396,884	294,718,000	268,068,000
North Carolina	146,958,460	108,845,957	98,436,715
Massachusetts	100,925,303	84,790,910	78,640,678
New Hampshire	69,933,971	50,122,152	59,592,244
Ticks	53,499,190	46,524,741	53,683,485
North Carolina	17,336,236	13,036,546	21,514,757
Massachusetts	10,206,709	10,589,945	13,383,379
Tobacco, cheese, butter, bunting and bandage cloths	402,312,139	274,255,642	239,866,071
Massachusetts	248,276,400	153,374,313	202,401,915
Twills and sateens	489,380,066	384,636,000	424,478,000
Massachusetts	130,902,592	90,166,148	116,915,845
Georgia	61,611,879	41,472,634	25,622,585
Connecticut	44,365,575	46,508,323	29,198,245
Denims	225,640,344	168,127,000	166,698,000
North Carolina	89,557,002	71,516,582	70,366,740
Georgia	32,591,652	19,989,343	- ¹
Massachusetts	19,372,683	12,599,069	18,204,837
Tire Duck	68,258,927	51,723,000	123,465,000
Massachusetts	17,921,361	11,059,044	39,639,018
Georgia	7,656,161	12,992,271	11,685,777
Ounce duck	139,221,366	97,033,000	178,540,000
Georgia	38,114,787	31,343,847	56,970,661
Texas	37,974,541	28,605,027	31,838,893
Alabama	29,134,834	20,950,042	- ¹
Numbered duck	27,862,308	38,167,000	34,496,000
Georgia	9,531,654	6,346,624	8,537,758
Maryland	8,607,810	7,926,282	- ¹
Tire fabrics, other than duck	158,317,776	43,934,000	36,806,000
Massachusetts	28,019,743 ²	18,215,138	18,647,503
Cotton blankets	88,060,112	91,520,000	96,621,000
Massachusetts	16,354,558	23,385,276	46,470,714
	Pounds	Pounds	Pounds
Yarns, for sale	620,725,267	484,218,907	618,034,098
North Carolina	259,579,191	198,917,839	199,191,556
Georgia	86,553,515	68,827,236	76,653,909
Massachusetts	79,272,641	71,094,939	154,709,604

¹ Not reported separately.

² Cord fabrics only.

Principal Classes of Cotton Goods produced by Sections, 1919, 1921 and 1923

	1923	1921	1919	INCREASE OR DECREASE (PER CENT)	
				1921 to 1923	1919 to 1923
<i>All Woven Goods (over 12 inches Wide)</i>					
United States:					
Square yards	8,264,219,579	6,703,835,942	6,317,397,984	23.3	30.8
Value	\$1,398,901,764	\$956,731,860	\$1,489,610,779	46.2	-6.1
Cotton-growing States:					
Square yards	4,767,309,272	3,620,559,108	3,213,197,498	31.7	48.4
Value	\$706,513,963	\$422,341,753	\$652,139,729	67.3	8.3
New England:					
Square yards	3,143,580,641	2,809,820,228	2,824,924,188	11.9	11.3
Value	\$563,108,841	\$444,435,688	\$703,159,102	26.7	-19.9
<i>Sheetings</i>					
United States:					
Square yards	1,695,520,069	1,600,998,979	1,368,946,386	5.9	23.9
Value	\$208,338,025	\$158,216,314	\$220,089,704	31.7	-5.3
Cotton-growing States:					
Square yards	1,305,829,140	1,195,389,693	1,047,305,819	9.2	24.7
Value	\$146,532,472	\$103,793,846	\$157,789,101	41.2	-7.1
New England:					
Square yards	329,035,866	352,571,097	271,009,722	-6.7	21.4
Value	\$50,158,249	\$45,870,433	\$52,966,997	9.3	-5.3
<i>Lawns, Nainsooks, Cambrics and Similar Muslins</i>					
United States:					
Square yards	367,209,215	392,203,289	417,893,406	-6.4	-12.1
Value	\$57,277,453	\$58,408,313	\$79,384,890	-1.9	-27.8
Cotton-growing States:					
Square yards	87,501,636	78,278,961	43,966,453	11.8	99.0
Value	\$10,348,294	\$7,805,712	\$7,084,796	32.6	46.1
New England:					
Square yards	268,066,419	313,824,113	361,875,163	-14.6	-25.9
Value	\$46,371,298	\$50,501,560	\$70,318,534	-8.2	-34.1

**Principal Classes of Cotton Goods produced by Sections,
1919, 1921 and 1923 — (Concluded)**

	1923	1921	1919	INCREASE OR DECREASE (PER CENT)	
				1921 to 1923	1919 to 1923
<i>Twills, Sateens, etc.</i>					
United States:					
Square yards	489,380,066	384,635,533	424,478,033	27.2	15.3
Value	\$91,589,275	\$51,834,924	\$101,056,691	76.7	-9.4
Cotton-growing States:					
Square yards	160,479,897	109,560,311	98,537,679	46.5	62.9
Value	\$31,770,025	\$13,993,289	\$27,338,840	127.0	16.2
New England:					
Square yards	288,703,542	234,427,583	289,461,382	23.2	-0.3
Value	\$52,894,403	\$33,453,605	\$66,724,057	58.1	-20.7
<i>Tobacco, Cheese, Butter, Bunting and Bandage Cloths</i>					
United States:					
Square yards	402,312,139	274,255,642	239,866,071	46.7	67.7
Value	\$20,110,478	\$10,023,745	\$16,976,323	100.6	18.5
Cotton-growing States:					
Square yards	137,418,047	98,068,082	23,226,060	40.1	491.7
Value	\$5,195,907	\$2,723,156	\$2,001,869	90.8	159.6
New England:					
Square yards	254,833,147	153,374,313	205,660,877	66.2	23.9
Value	\$14,263,728	\$6,495,213	\$14,374,629	119.6	-0.8
<i>Yarns for Sale</i>					
United States:					
Pounds	620,725,267	484,218,907	618,034,098	28.2	0.4
Value	\$348,684,605	\$218,555,043	\$453,624,493	59.5	-23.1
Cotton-growing States:					
Pounds	451,634,879	347,875,291	359,003,634	29.8	25.8
Value	\$232,994,306	\$128,267,472	\$228,991,462	81.6	1.7
New England:					
Pounds	113,309,662	104,393,496	208,964,523	8.5	-45.8
Value	\$79,800,563	\$77,742,325	\$191,456,771	2.6	-58.3

Size of Cotton Manufacturing Establishments

[Based on Statistics of United States Bureau of the Census]

	Establish- ments	Wage Earners	Wage Earners per Estab- lishment	Active Spindles (000 omitted)	Active Spindles per Estab- lishment	Looms	Looms per Estab- lishment
1879 .	756	172,544	228	10,653	14,091	225,759	298
1889 .	905	218,876	242	14,188	15,677	324,866	358
1899 .	1,055	302,861	287	19,051	18,058	450,682	427
1904 .	1,154	315,874	274	23,195	20,100	540,910	468
1909 .	1,324	378,880	286	27,426	20,715	632,963	477
1914 .	1,328	393,404	296	30,915	23,279	672,754	506
1919 .	1,496	446,852	299	33,796	22,591	692,169	462
1921 .	1,527	425,817	278	33,071	21,658	— ¹	— ¹
1923 .	1,643	497,378	302	36,260	22,069	— ¹	— ¹

¹ Not available.

United States Imports of Cotton Manufactures, by Classes of Goods, in Terms of Quantity

[Figures are for calendar years]

Source: United States Department of Commerce

This table embraces only those classes of goods which can be expressed in units of quantity. It does not include, necessarily, other classes which cannot be so expressed. The table on imports expressed in terms of value includes all the imports of manufactures of cotton.

	1915	1916	1918	1919	1920	1921	1922	1923	1924	1925
Cotton thread and yarn:										
Thread and yarns, warps or warp yarn, on beams, in skeins, etc. (pounds)	6,041,854	9,930,434	3,936,481	3,861,968	10,629,645	3,140,102	5,426,987	5,269,354	3,733,422	3,618,657
Sewing thread, crochet, darning and knitting cotton (100 yards)	-	-	-	44,938,565	83,331,972	45,966,524	51,803,837	42,326,041	36,993,528	29,902,175
Cloths:										
Unbleached (square yards)	4,072,746	11,533,599	6,587,809	19,732,441	50,408,634	16,365,557	23,028,850 ¹	95,186,110 ²	114,729,068	75,397,414
Bleached (square yards)	13,639,472	14,534,086	5,938,830	9,434,881	23,923,795	22,582,543	17,863,670 ¹	14,888,305 ¹	5,703,554	4,831,677
Colored, dyed, printed and woven-figured (square yards)	25,047,452	-	-	-	-	-	-	108,895,883 ³	53,952,132	29,014,158
Dyed in the piece (square yards)	-	24,469,857	11,866,779	11,577,432	38,746,021	39,927,187	41,894,470 ¹	-	-	-
Printed (square yards)	-	5,011,711	2,006,832	3,725,381	13,611,021	8,927,300	11,261,896 ¹	-	-	-
All other (square yards)	-	10,857,385	5,839,319	5,283,316	14,099,894	18,528,011	15,599,198 ¹	-	-	-
Total cloths (square yards)	42,759,670	66,406,638	32,839,569	49,753,451	140,788,365	106,330,598	109,648,063 ¹	218,970,307 ¹	177,355,654	109,243,249
Laces, embroideries, etc., and articles made thereof (except wearing apparel):										
Embroideries, including edgings, insertings, and galloons (yards)	-	-	-	7,586,004	24,889,980	29,885,458	24,012,109 ¹	-	-	-
Lace window curtains (square yards)	-	-	-	362,318	1,426,213	991,634	1,729,452	1,953,433	1,363,581	1,290,069
Pile fabrics and Terry-woven fabrics (square yards)	2,996,729	4,227,528	357,093	433,335	1,038,664	307,582	121,785 ¹	364,516 ¹	431,451 ¹	555,201 ¹
Tapestries and Jacquard figured upholstery goods (square yards)	-	-	-	1,244,506	9,280,503	2,846,356	1,675,494 ¹	734,838 ¹	1,224,372 ¹	1,943,460 ¹
Waste or flocks (pounds)	16,003,487	29,915,740	1,267,336	2,124,663	9,090,767	4,861,682	28,399,261	77,022,332	33,634,041	36,393,055
Wearing apparel:										
Knit goods:										
Gloves (dozen pairs)	-	-	-	181,239	386,414	1,114,080	1,774,978	1,158,420	1,364,980	1,659,131
Hosiery (dozen pairs)	848,349	57,927	116,310	65,955	228,285	756,028	1,357,602	611,718	530,939	563,246
All other knit goods (dozens)	-	-	-	52,880	21,951	31,522	10,528	111,337	105,823	85,998

¹ January 1 to September 21, after which new tariff law is in effect.

² Estimated.

³ Not separately classified under new tariff law.

⁴ Pounds only reported after September 21, 1922.

⁵ Quantity not available.

NOTE. — Where no figures are given for the earlier years (as for sewing thread, crochet, darning and knitting cotton prior to 1919) the items were either not compiled or not separately classified in those years. If compiled, they were grouped with other items shown in the table. It should not be assumed that there were no imports of such items if no figures were given for these items separately.

United States Imports of Cotton Manufactures, by Classes of Goods, in Terms of Value

[Figures are for calendar years]

Source: United States Department of Commerce

	1915	1916	1918	1919	1920	1921	1922	1923	1924	1925
Cotton thread and yarn: Thread and carded yarns, warps, or warp yarns, on beams, in skeins, etc. Sewing thread, crochets, darnings and knit- ting cotton	\$3,315,350	\$7,378,667	\$6,338,487	\$7,031,356	\$25,418,196	\$3,752,332	\$6,038,543	\$5,666,886	\$4,488,991	\$5,316,498
Cloths:										
Unbleached	\$393,444	\$1,203,915	\$2,223,962	\$5,402,862	\$13,748,108	\$2,016,817	\$7,933,985	\$18,287,386	\$21,889,138	\$15,422,983
Bleached	2,023,766	2,446,987	1,860,397	3,318,675	9,168,582	5,830,112	6,068,135	3,696,394	1,551,653	1,581,366
Colored, dyed, printed, and woven-figured	4,219,123	—	—	—	—	—	25,071,330	25,204,253	14,256,555	9,416,827
Dyed in the piece	—	5,595,294	4,575,846	5,259,942	16,787,812	11,552,492	—	—	—	—
Printed	—	1,020,966	1,656,763	946,538	6,060,191	3,241,521	—	—	—	—
All other	—	1,727,730	2,041,288	2,026,661	5,980,054	5,885,307	—	—	—	—
Total cloths	\$6,636,333	\$11,904,922	\$11,648,031	\$17,664,903	\$51,753,747	\$29,426,249	\$39,073,450	\$47,188,033	\$37,703,416	\$26,424,126
Lace window curtains	\$123,368	\$571,410	\$142,911	\$194,520	\$1,097,903	\$567,474	\$767,786	\$722,878	\$517,896	\$173,014
Laces and lace articles, including lace eil- ings, insertings, and galloons:										
Hand-made	41,770	440,870	395,340	925,608	1,021,173	589,219	2,325,623	2,168,354	2,083,357	1,685,550
All other	10,229,030	10,459,410	4,948,662	7,792,493	12,093,224	8,978,147	5,686,109	9,259,362	11,951,227	7,612,553
Nets and nettings	1,171,324	2,777,470	1,914,449	2,469,638	1,946,091	1,815,438	1,405,691 ²	1,139,555	1,038,264	1,109,007
Vels and velings	8,727	22,039	8,863	23,851	69,681	37,385	— ³	— ³	— ³	— ³
Total laces, etc.	\$19,753,031	\$20,451,984	\$8,872,428	\$13,909,116	\$24,300,149	\$16,703,583	\$14,451,585	\$17,013,228	\$20,105,883	\$14,602,694
Pile fabrics and Terry-woven fabrics	\$1,118,620	\$2,018,593	\$354,356	\$593,147	\$1,115,295	\$256,295	\$245,887	\$899,837	\$353,782	\$1,165,370
Tapestries and Jacquard-figured upholstery goods	—	—	—	426,550	3,355,811	1,781,969	1,145,595	1,196,207	1,947,198	3,276,685
Waste or flocks	686,535	1,471,951	94,123	216,878	882,542	309,905	2,674,371	6,277,755	3,244,346	3,726,692
Wearing apparel:										
Product of the Philippine Islands	—	—	1,291,462	2,796,634	7,349,452	5,154,258	2,353,312	393,735	3,702,741	3,958,381
Knit goods	2,861,565	771,895	—	812,206	2,440,486	4,819,238	7,574,665	5,731,283	5,947,218	7,721,153
Gloves	—	—	—	305,854	1,345,637	3,271,300	5,360,454	4,034,413	4,246,798	5,488,064
Hosiery	909,442	135,721	134,663	135,574	908,829	1,358,434	2,141,124	1,326,247	1,402,318	1,942,246
All other knit goods	1,952,123	636,174	1,156,799	137,778	186,020	189,504	73,057	370,623	291,102	293,843
Total manufactures of cotton	\$12,172,291	\$53,751,310	\$39,808,295	\$52,649,218	\$137,431,814	\$75,428,323	\$87,069,809	\$100,154,179	\$90,913,637	\$79,273,972

¹ Not separately classified under new tariff law effective September 22, 1922.

² "Includes vels and velings."

³ Not separately classified under new tariff law; included with "nets and nettings."

United States Exports of Cotton Manufactures, by Classes of Goods, in Terms of Quantity

[Figures are for calendar years]

Source: United States Department of Commerce

This table embraces only those classes of goods which can be expressed in units of quantity. It does not include, necessarily, other classes which cannot be so expressed.

	1915	1917	1918	1919	1920	1921	1922 ¹	1923 ¹	1924 ¹	1925 ¹
Cloths (running yards):										
Duck:										
Unbleached	-	8,395,833	5,097,520	9,128,503	13,183,255	5,890,284	8,277,695	6,880,282	7,181,584	9,136,454
Bleached	-	2,458,643	2,254,458	4,263,404	4,841,160	932,532	1,852,514	1,059,393	1,685,747	1,717,388
Colored	-	1,493,547	731,388	1,301,202	1,570,475	604,676	809,476	900,142	863,564	816,064
All other cloths:										
Unbleached	209,998,108	125,319,773	73,436,891	142,885,303	138,343,302	218,667,315	177,172,182	103,286,881	110,921,474	129,467,643
Bleached	69,914,986	143,198,426	99,227,003	126,349,050	184,308,835	83,676,191	99,681,739	77,635,357	82,458,805	92,937,823
Colored	-	-	-	-	-	-	-	-	-	-
Printed	98,181,200	183,205,059	139,768,162	137,665,935	159,132,993	50,327,226	113,319,448	102,202,243	97,262,828	111,197,504
Dyed in the piece	38,740,820	105,419,979	133,174,426	156,051,890	178,489,420	83,913,351	101,467,669	99,577,461	93,955,175	107,344,997
Dyed in the yarn	101,503,188	195,037,632	90,484,726	105,394,039	138,821,514	67,301,267	84,911,809	72,662,000	81,687,311	90,696,015
Total cloths	518,338,302	764,621,892	544,174,574	683,045,326	818,750,854	551,512,942	587,492,532	464,293,759	477,815,408	543,313,888
Mill waste (pounds)										
Waste (except paper stock) (pounds)	44,789,174	62,259,352	46,808,332	57,317,920	57,877,150	39,002,394	58,572,181	55,986,852	65,616,568	77,048,181
Hosiery (dozen pairs)	5,810,034	4,075,111	5,024,629	6,182,533	6,817,037	6,580,907	8,089,668	15,232,057	18,705,515	19,068,187
Yarn (pounds)	-	-	5,574,343	9,477,338	11,575,655	2,508,258	4,792,004	5,159,750	4,825,563	5,534,222
Total	-	-	13,355,800	20,699,399	24,099,399	14,294,176	15,503,850	12,081,384	13,673,569	21,891,810

¹ Cloth exports are in square yards.

NOTE. — Where no figures are given for the earlier years (as for unbleached, bleached, and colored duck prior to 1917) the items were either not compiled or not separately classified in those years. If compiled, they were grouped with other items shown in the table. It should not be assumed that there were no exports of such items if no figures are given for these items separately.

United States Exports of Cotton Manufactures, by Classes of Goods, in Terms of Value

[Figures are for calendar years]

Source: United States Department of Commerce

	1915	1917	1918	1919	1920	1921	1922	1923	1924	1925
Blankets	-	-	\$2,498,163	\$3,551,511	\$5,196,387	\$990,808	\$960,214	\$970,258	\$728,941	\$817,685
Cloths:										
Duck:	-	-	-	-	-	-	-	-	-	-
Unbleached	-	\$4,255,424	\$3,430,806	\$7,469,640	\$10,753,578	\$2,818,296	\$3,508,982	\$3,216,638	\$3,353,031	\$4,157,976
Bleached	-	1,092,157	1,234,330	3,037,108	2,892,720	399,373	613,239	475,947	494,486	616,670
Colored	-	471,781	312,967	718,083	882,682	262,836	238,532	372,185	325,816	298,066
All other cloths:	-	-	-	-	-	-	-	-	-	-
Unbleached	\$17,631,374	\$11,787,698	\$11,830,027	\$23,591,461	\$32,029,596	\$19,669,270	\$19,296,926	\$13,731,328	\$13,943,631	\$15,087,789
Bleached	4,822,465	17,061,784	19,090,986	26,213,748	50,841,463	11,702,965	13,871,473	12,287,691	12,075,860	13,352,271
Colored	-	-	-	-	-	-	-	-	-	-
Printed	5,646,294	18,559,148	21,628,277	23,295,902	38,584,777	10,575,903	14,802,468	15,196,072	13,925,536	14,921,031
Dyed in the piece	3,360,508	13,460,989	30,073,042	40,668,903	58,354,161	15,505,740	18,111,287	19,679,792	18,082,158	20,320,460
Dyed in the yarn	7,272,941	26,281,056	19,918,898	27,096,972	43,224,280	10,640,669	14,789,205	14,553,149	16,003,459	16,257,049
Total cloths	\$38,733,582	\$95,480,667	\$107,519,333	\$151,997,817	\$238,153,557	\$71,573,875	\$85,232,112	\$79,357,337	\$78,204,877	\$85,011,312
Laces and embroideries	\$382,443	\$1,614,299	\$1,569,322	\$1,731,675	\$1,629,409	\$611,506	\$359,634	\$319,454	\$205,088	\$245,057
Mill waste	3,051,899	9,005,446	9,488,664	12,411,704	12,368,596	3,678,527	6,067,303	7,609,698	7,616,188	8,726,584
Rags (except paper stock)	227,608	245,419	342,419	515,754	641,557	296,420	462,757	987,234	1,492,711	1,394,397
Thread, sewing, crochet, etc.	-	-	2,824,776	4,367,762	4,471,617	2,056,328	2,034,732	2,069,320	1,772,668	1,280,347
Wearing apparel:										
Collars and cuffs	-	329,227	771,219	771,219	816,142	341,789	348,646	463,415	770,823	683,373
Corsets	-	1,923,078	2,880,858	2,880,858	3,683,767	1,695,555	1,924,036	1,745,581	1,902,745	-
Knit goods	-	15,008,889	-	-	-	-	-	-	-	-
Hosiery	-	13,258,474	26,882,566	26,882,566	37,879,665	6,232,198	9,221,834	10,525,183	9,095,505	10,494,361
Underwear	-	2,897,476	8,602,293	14,067,839	14,067,839	3,602,493	6,185,980	5,025,008	3,740,662	3,827,662
All other knit goods	-	945,833	1,508,995	2,510,558	427,773	546,583	530,158	611,221	677,121	677,121
Yarn	3,610,912	6,583,081	8,846,694	14,488,630	20,014,949	5,679,075	6,815,664	6,632,672	7,423,967	11,896,290
Total manufactures of cotton	\$95,833,456	\$158,818,816	\$181,029,486	\$273,115,704	\$402,041,277	\$117,234,542	\$138,701,617	\$138,046,354	\$132,710,741	\$148,238,446

NOTE. — Where no figures are given for the earlier years (as for blankets for the years prior to 1918) the items were either not compiled or not separately classified in those years. If compiled, they were grouped with other items shown in the table. It should not be assumed that there were no exports of such items if no figures are given for these items separately.

Conversely figures for certain classes of goods (as for all other cloths, colored, after 1914) are discontinued when this classification is broken up into several sub-classifications, all other cloths, colored, being subdivided into printed, dyed in the piece, and dyed in the yarn.

United States Imports of Cotton Manufactures, by Countries

[Statistics are for years ending June 30 from 1914 to 1919, inclusive, and for calendar years thereafter]

Source: United States Department of Commerce

COUNTRIES	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924
Europe:										
United Kingdom . . .	\$20,220,239	\$27,772,312	\$39,542,259	\$30,303,244	\$23,192,647	\$82,128,618	\$27,917,368	\$39,003,963	\$51,222,189	\$42,447,766
Germany . . .	10,140,775	1,991,717	53,500	-	-1	4,817,137	7,417,485	12,352,330	17,087,150	12,302,445
France . . .	5,929,776	6,710,360	5,856,723	3,358,727	3,555,197	10,572,118	9,441,632	11,267,774	13,713,905	16,402,486
Switzerland . . .	7,360,128	7,879,254	4,286,848	2,365,277	1,326,133	17,261,975	15,177,834	11,188,442	5,968,020	4,414,537
Belgium . . .	220,702	28,312	9,695	1,431	621	861,740	424,198	692,459	1,045,021	1,280,353
Austria . . .	195,331 ²	20,344 ²	-	-	-1	-	-	89,856	145,247	166,058
Italy . . .	421,409	741,448	1,526,695	588,030	266,191	1,441,069	800,992	613,800	1,236,087	1,578,784
Spain . . .	115,840	72,272	90,595	68,017	23,754	60,055	67,940	55,748	102,192	54,052
Czechoslovakia . . .	- ³	- ³	- ³	- ³	- ³	387,953	329,938	697,288	967,748	985,103
Turkey (including Asiatic Turkey) . . .	25,353	2,796	-	-	-1	104,803	55,328	22,418	53,775	18,682
All other Europe . . .	187,495	235,161	286,394	186,733	304,245	2,220,696	958,069	1,030,848	925,430	832,894
America:										
Canada . . .	129,768	77,962	184,367	2,679,683	2,078,544	248,108	344,590	211,722	263,439	135,949
Mexico . . .	35,088	34,649	90,814	15,250	11,035	454,352	78,365	22,146	100,897	46,430
All other America . . .	13,227	6,337	7,796	46,063	3,037	12,134	8,854	20,088	30,469	48,016
Japan . . .	1,156,104	1,861,382	3,844,581	4,280,957	1,363,512	7,062,960	3,731,293	4,157,448	3,894,760	3,123,072
China . . .	28,767	61,864	340,694	769,279	456,128	2,118,254	3,038,915	2,846,280	2,548,556	2,464,848
British India . . .	6,370	3,578	23,578	18,192	5,548	32,101	71,627	188,208	212,696	207,445
All other countries . . .	18,751	12,092	37,145	70,298	2,176,131	7,769,274	5,567,067	2,608,991	635,598	4,477,455
Total . . .	\$46,205,123	\$47,511,870	\$56,181,684	\$44,751,181	\$34,762,723	\$137,583,347	\$75,430,495	\$87,069,809	\$100,153,179	\$90,913,641

¹ Included in "All other Europe."

² Includes Hungary.

³ Included in Austria.

United States Exports of Cotton Manufactures, by Countries

[Statistics are for years ending June 30 from 1914 to 1919, inclusive, and for calendar years thereafter]

Source: United States Department of Commerce

COUNTRIES	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924
Europe:										
United Kingdom	223,694,368	226,706,477	10,779,950	\$10,070,789	\$12,706,495	\$25,900,099	\$6,894,979	\$11,351,039	\$9,232,304	\$8,138,680
Germany	117,311	1,468	—	—	— ¹	1,964,236	11,522,910	1,119,584	1,158,523	1,827,423
All other Europe	6,287,823	11,537,916	9,507,287	9,489,084	38,907,913	34,491,875	11,533,970	7,004,752	4,933,250	3,570,284
America:										
Canada	9,771,888	18,274,627	28,204,480	27,984,121	30,555,383	40,526,138	18,207,778	20,540,062	19,204,728	16,384,203
Mexico	2,260,834	4,891,956	11,011,886	18,606,003	11,057,043	12,452,319	13,703,906	6,795,751	6,701,495	7,272,995
Central America	1,982,498	4,561,658	8,064,905	4,877,986	10,123,223	19,064,743	8,800,540	9,812,808	9,882,329	11,530,092
British West Indies (including Bermuda)	1,233,055	1,973,542	2,468,030	3,506,299	3,524,740	7,052,030	3,297,430	3,383,094	2,774,123	2,291,097
Cuba	4,325,431	7,741,671	10,630,627	17,728,667	16,819,419	73,364,132	6,744,018	11,464,303	22,880,293	20,881,923
Haiti	770,452	2,276,740	2,496,083	2,666,510	4,533,777	5,779,045	2,112,481	3,358,270	4,030,255	3,984,637
All other North America	2,131,500	1,584,558	3,231,716	5,668,253	3,279,006	14,828,626	2,116,574	3,132,172	4,087,780	4,941,952
Brazil	189,081	782,755	1,588,549	3,597,927	5,850,310	5,089,804	567,005	1,015,537	977,277	1,061,048
Chile	630,031	1,638,043	4,480,399	7,333,773	10,830,453	7,288,468	2,786,929	4,775,339	5,337,537	4,473,985
Colombia	846,703	2,607,192	3,793,316	2,355,193	3,351,124	25,308,682	2,190,974	5,765,011	4,734,691	5,996,986
Peru	128,301	1,075,086	2,738,782	2,178,630	2,178,630	6,128,972	1,099,481	1,957,994	2,127,413	1,897,225
Venezuela	413,203	1,114,006	2,278,906	1,012,670	1,482,650	10,303,687	514,331	882,633	1,463,983	2,311,810
All other South America	1,609,616	8,529,655	13,547,220	21,761,643	34,956,963	41,657,394	12,046,946	17,557,471	14,693,034	14,215,190
Asia and Oceania:										
China	1,261,601	953,677	681,044	1,217,205	2,954,883	9,201,386	2,576,539	2,248,349	539,607	536,805
British India	1,032,999	1,262,347	894,480	1,034,590	933,503	4,828,097	2,699,733	854,531	828,957	1,177,931
British Australasia	2,333,682	5,312,125	5,642,326	5,664,326	12,601,593	14,361,911	3,590,761	5,114,867	3,583,927	2,600,055
Aden	1,478,922	1,012,830	1,134,218	173,986	206,821	1,141,240	1,334,537	1,433,096	742,833	254,277
Philippine Islands	7,898,489	5,976,922	9,340,976	17,262,881	17,179,046	23,526,230	8,022,385	14,263,116	13,250,098	11,357,251
All other Asia and Oceania	454,099	777,958	1,625,716	1,747,806	4,832,086	12,008,056	2,668,763	1,728,391	1,878,240	1,214,900
Africa	860,648	1,855,837	2,134,815	2,869,709	3,691,894	5,114,107	1,740,882	3,093,427	2,995,627	3,747,592
Total	\$71,685,259	\$112,053,235	\$136,299,842	\$169,378,223	\$232,206,566	\$402,041,277	\$117,294,542	\$138,701,617	\$138,045,351	\$132,710,741

¹ Included in "All other Europe."

United States Exports of Cotton Cloth during Calendar Years

Source: United States Department of Commerce

YEAR													Linear Yards
1900	.	.	.	.	.	.	.	.	.	.	.	.	257,910,508
1901	.	.	.	.	.	.	.	.	.	.	.	.	376,233,960
1902	.	.	.	.	.	.	.	.	.	.	.	.	525,495,309
1903	.	.	.	.	.	.	.	.	.	.	.	.	374,074,192
1904	.	.	.	.	.	.	.	.	.	.	.	.	434,989,686
1905	.	.	.	.	.	.	.	.	.	.	.	.	790,259,024
1906	.	.	.	.	.	.	.	.	.	.	.	.	512,229,720
1907	.	.	.	.	.	.	.	.	.	.	.	.	216,387,642
1908	.	.	.	.	.	.	.	.	.	.	.	.	272,242,179
1909	.	.	.	.	.	.	.	.	.	.	.	.	380,521,971
1910	.	.	.	.	.	.	.	.	.	.	.	.	295,736,336
1911	.	.	.	.	.	.	.	.	.	.	.	.	410,200,201
1912	.	.	.	.	.	.	.	.	.	.	.	.	464,253,126
1913	.	.	.	.	.	.	.	.	.	.	.	.	466,677,252
1914	.	.	.	.	.	.	.	.	.	.	.	.	326,477,889
1915	.	.	.	.	.	.	.	.	.	.	.	.	518,338,302
1916	.	.	.	.	.	.	.	.	.	.	.	.	620,255,896
1917	.	.	.	.	.	.	.	.	.	.	.	.	764,621,892
1918	.	.	.	.	.	.	.	.	.	.	.	.	544,174,574
1919	.	.	.	.	.	.	.	.	.	.	.	.	683,045,326
1920	.	.	.	.	.	.	.	.	.	.	.	.	818,750,954
1921	.	.	.	.	.	.	.	.	.	.	.	.	551,512,942
1922	.	.	.	.	.	.	.	.	.	.	.	.	587,492,532 ¹
1923	.	.	.	.	.	.	.	.	.	.	.	.	464,520,397 ¹
1924	.	.	.	.	.	.	.	.	.	.	.	.	477,815,408 ¹
1925	.	.	.	.	.	.	.	.	.	.	.	.	543,313,888 ¹

¹ Square yards.

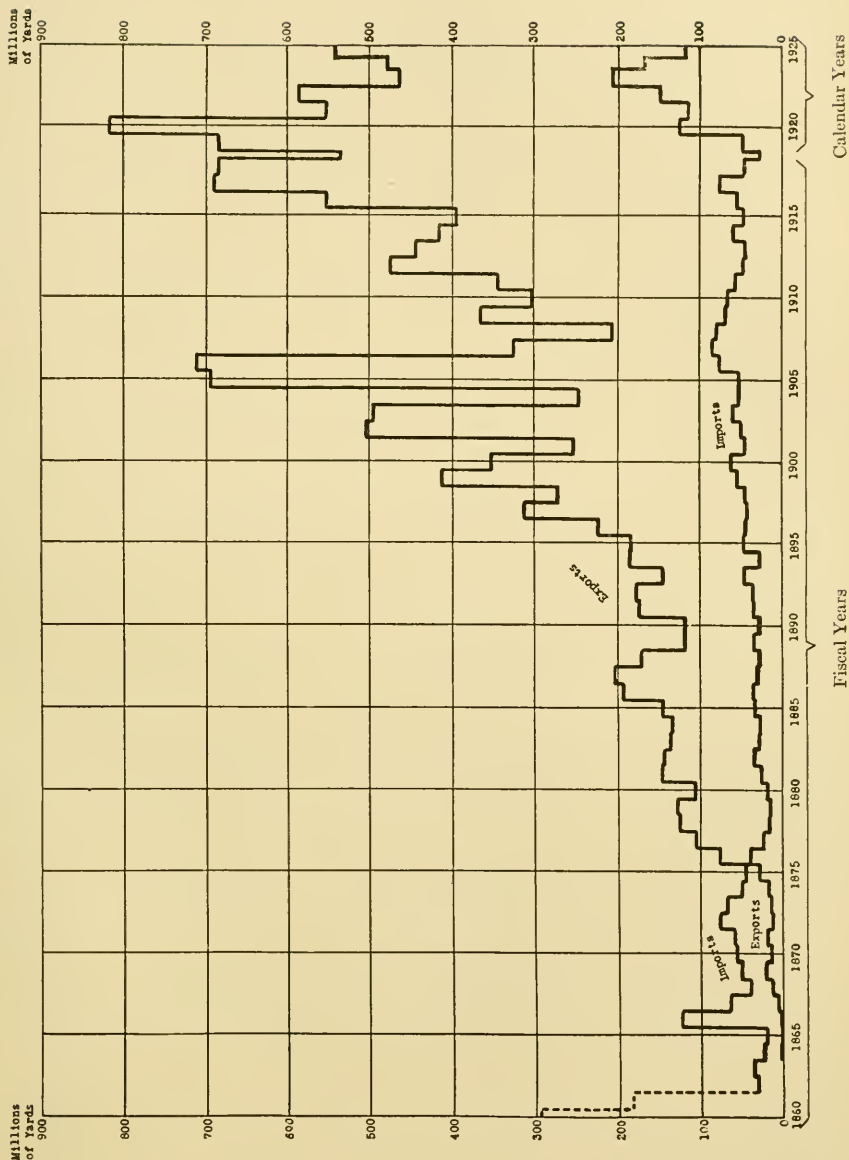
United States Imports of Cotton Cloth during Calendar Years

Source: United States Department of Commerce

YEAR													Square Yards
1900	.	.	.	.	.	.	.	.	.	.	.	.	53,264,507
1901	.	.	.	.	.	.	.	.	.	.	.	.	41,891,885
1902	.	.	.	.	.	.	.	.	.	.	.	.	56,199,911
1903	.	.	.	.	.	.	.	.	.	.	.	.	59,250,082
1904	.	.	.	.	.	.	.	.	.	.	.	.	44,755,238
1905	.	.	.	.	.	.	.	.	.	.	.	.	61,381,256
1906	.	.	.	.	.	.	.	.	.	.	.	.	78,321,752
1907	.	.	.	.	.	.	.	.	.	.	.	.	91,613,881
1908	.	.	.	.	.	.	.	.	.	.	.	.	60,099,151
1909	.	.	.	.	.	.	.	.	.	.	.	.	73,803,398
1910	.	.	.	.	.	.	.	.	.	.	.	.	55,276,921
1911	.	.	.	.	.	.	.	.	.	.	.	.	52,031,130
1912	.	.	.	.	.	.	.	.	.	.	.	.	45,497,927
1913	.	.	.	.	.	.	.	.	.	.	.	.	46,563,568
1914	.	.	.	.	.	.	.	.	.	.	.	.	62,272,013
1915	.	.	.	.	.	.	.	.	.	.	.	.	42,759,670
1916	.	.	.	.	.	.	.	.	.	.	.	.	66,406,638
1917	.	.	.	.	.	.	.	.	.	.	.	.	65,296,802
1918	.	.	.	.	.	.	.	.	.	.	.	.	32,839,569
1919	.	.	.	.	.	.	.	.	.	.	.	.	49,753,481
1920	.	.	.	.	.	.	.	.	.	.	.	.	141,330,861
1921	.	.	.	.	.	.	.	.	.	.	.	.	106,308,379
1922	.	.	.	.	.	.	.	.	.	.	.	.	142,000,000 ¹
1923	.	.	.	.	.	.	.	.	.	.	.	.	218,970,307 ¹
1924	.	.	.	.	.	.	.	.	.	.	.	.	177,385,654
1925	.	.	.	.	.	.	.	.	.	.	.	.	109,243,249

¹ Partly estimated, as imports of cotton cloth were reported in pounds only from September 22, 1922, to March 31, 1923.

United States Imports and Exports of Cotton Cloths compared



United States Imports of Specified Cloths¹

Source: Bureau of Foreign and Domestic Commerce

Month	Lawns, Organdies, Nainsooks, Cambrics, etc. (Square Yards)	Broadcloths and Poplins (Square Yards)	Sateens not more than 7 Harnesses (Square Yards)	Sateens woven with 8 or more Harnesses (Square Yards)	Vailes (Square Yards)	Crepes (Square Yards)	Ginghams (Square Yards)	Ratines (Square Yards)	Jaquard- woven Cloths, Other than Swirls or Lappets (Square Yds.)	Dotted Swisses (Square Yards)
1924										
January ²	—	—	—	—	—	—	—	—	—	—
February	539,253	6,261,566	3,608,261	69,624	1,715,269	400,035	431,792	418,690	424,311	244,810
March	573,910	5,868,201	3,110,957	39,472	1,270,502	469,599	365,989	502,421	250,127	235,633
April	709,154	5,686,978	2,154,338	87,081	799,074	554,019	97,376	228,339	118,464	179,069
May	646,582	6,244,768	2,473,841	408,415	351,768	533,243	150,997	71,843	158,872	114,508
June	688,985	6,490,276	2,052,087	436,473	387,770	352,843	138,908	13,814	60,027	31,603
July	723,761	5,317,978	1,748,942	472,340	311,474	324,897	141,129	21,389	36,355	19,444
August	171,186	6,927,692	2,040,087	292,916	323,309	185,421	88,936	39,584	38,411	9,603
September	821,669	9,256,403	1,365,500	564,532	632,321	415,206	56,397	37,203	34,935	30,242
October	801,751	9,488,522	968,771	230,022	450,210	819,734	92,621	25,435	32,472	1,036
November	1,296,395	12,394,819	1,156,575	352,335	815,282	834,456	140,887	62,036	86,925	29,863
December	—	—	—	—	—	—	—	—	—	—
Total	7,972,646	73,937,203	20,679,362	2,953,210	7,056,979	4,889,455	1,706,032	1,450,754	1,240,899	895,921
1925										
January	1,067,511	14,558,003	1,233,238	291,021	524,024	662,565	115,831	91,503	97,148	41,846
February	1,078,065	9,810,944	878,566	244,823	380,305	657,820	209,632	63,179	65,647	35,281
March	1,263,861	10,309,348	862,109	286,705	536,750	462,018	134,997	19,395	65,794	41,507
April	1,876,525	5,694,636	831,143	263,975	133,385	298,855	93,549	3,125	39,774	17,870
May	880,886	3,454,120	411,927	202,824	465,365	396,412	68,814	932	35,106	12,072
June	770,240	2,199,380	300,325	220,541	465,990	197,089	35,481	56	48,624	7,440
July	732,471	2,062,481	168,735	264,005	383,778	89,402	234,840	56	48,930	9,234
August	526,346	1,358,369	142,037	254,607	244,143	63,457	24,609	1,908	63,982	5,469
September	925,396	2,755,876	180,803	725,516	254,573	76,753	101,684	4,408	89,491	6,000
October	1,435,682	3,754,415	188,224	250,409	600,333	105,359	163,733	1,721	40,796	13,567
November	770,275	3,487,949	443,684	108,013	683,575	95,777	34,288	10,434	85,898	8,415
December	1,368,001	3,280,588	343,738	191,122	879,870	224,569	82,194	677	83,147	11,568
Total	11,740,259	63,396,109	5,993,559	2,794,161	5,552,482	3,332,556	1,259,655	197,398	736,237	211,569

¹ These statistics do not include all types of cloths imported, and are collected at only the more important ports of the United States. The figures, however, amount to practically 90 per cent of the cloth imports for the period covered.² Figures not available in comparable form.

British Exports of Cotton Cloth

Source: British Board of Trade

YEAR													Yards
1900	.	.	.	.	.	.	.	.	.	.	.	.	5,031,727,000
1901	.	.	.	.	.	.	.	.	.	.	.	.	5,364,600,000
1902	.	.	.	.	.	.	.	.	.	.	.	.	5,331,552,200
1903	.	.	.	.	.	.	.	.	.	.	.	.	5,157,315,500
1904	.	.	.	.	.	.	.	.	.	.	.	.	5,591,822,600
1905	.	.	.	.	.	.	.	.	.	.	.	.	6,196,783,900
1906	.	.	.	.	.	.	.	.	.	.	.	.	6,260,771,400
1907	.	.	.	.	.	.	.	.	.	.	.	.	6,297,707,900
1908	.	.	.	.	.	.	.	.	.	.	.	.	5,530,808,500
1909	.	.	.	.	.	.	.	.	.	.	.	.	5,722,158,100
1910	.	.	.	.	.	.	.	.	.	.	.	.	6,017,625,200
1911	.	.	.	.	.	.	.	.	.	.	.	.	6,653,672,300
1912	.	.	.	.	.	.	.	.	.	.	.	.	6,912,919,700
1913	.	.	.	.	.	.	.	.	.	.	.	.	7,075,252,000
1914	.	.	.	.	.	.	.	.	.	.	.	.	5,735,744,500
1915	.	.	.	.	.	.	.	.	.	.	.	.	4,748,452,900
1916	.	.	.	.	.	.	.	.	.	.	.	.	5,254,222,700
1917	.	.	.	.	.	.	.	.	.	.	.	.	4,978,237,900
1918	.	.	.	.	.	.	.	.	.	.	.	.	3,699,252,300
1919	.	.	.	.	.	.	.	.	.	.	.	.	3,523,660,000
1920 ¹	.	.	.	.	.	.	.	.	.	.	.	.	4,435,405,000
1921	.	.	.	.	.	.	.	.	.	.	.	.	2,902,288,900
1922	.	.	.	.	.	.	.	.	.	.	.	.	4,183,729,100
1923	.	.	.	.	.	.	.	.	.	.	.	.	4,140,231,900
1924	.	.	.	.	.	.	.	.	.	.	.	.	4,443,959,500
1925	.	.	.	.	.	.	.	.	.	.	.	.	4,433,745,300

¹ Beginning in 1920, figures are for square yards.

High and Low Prices of Middling Upland Spot Cotton in New York

[In cents per pound]

Source: New York Cotton Exchange

The years as given are the official cotton seasons. Through 1913-14 the seasons were from September 1 to August 31. Starting with 1914-15 they have been from August 1 to July 31.

SEASON	High	Low
1900-01	12	8 $\frac{1}{16}$
1901-02	9 $\frac{7}{8}$	7 $\frac{13}{16}$
1902-03	13.50	8.30
1903-04	17.25	9.50
1904-05	11.65	6.85
1905-06	12.60	9.85
1906-07	13.50	9.60
1907-08	13.55	9.90
1908-09	13.15	9.00
1909-10	16.45	12.40
1910-11	19.75	12.30
1911-12	13.40	9.20
1912-13	13.40	10.75
1913-14	14.50	11.90
1914-15	10.60	7.25
1915-16	13.45	9.20
1916-17	27.65	13.35
1917-18	36.00	21.20
1918-19	38.20	25.00
1919-20	43.75	28.85
1920-21	40.00	10.85
1921-22	23.75	12.80
1922-23	31.30	20.35
1923-24	37.65	23.50
1924-25	31.50	23.41

Highest and Lowest Prices paid for the Principal

DURING MONTH OF—	JANUARY DELIVERY		MARCH DELIVERY		MAY DELIVERY		JULY DELIVERY	
	High	Low	High	Low	High	Low	High	Low
<i>Season of 1922-23</i>								
August, 1922 . . .	22.76	19.98	22.80	20.00	22.70	20.00	22.50	19.95
September . . .	23.00	20.11	22.97	20.24	22.95	20.20	22.60	20.00
October . . .	24.29	20.33	24.35	20.40	24.24	20.35	24.00	20.22
November . . .	26.56	23.63	26.45	23.67	26.12	23.56	25.74	23.28
December . . .	26.75	24.15	27.02	24.29	27.10	24.22	26.87	23.96
January, 1923 . . .	28.85	26.10	28.87	26.30	29.05	26.31	28.79	26.10
February . . .	25.74	24.50	30.17	26.93	30.29	27.22	29.39	26.77
March . . .	26.50	23.25	31.35	29.68	31.59	28.32	30.74	27.50
April . . .	25.32	23.07	24.80	23.00	30.05	26.90	29.25	26.06
May . . .	24.20	21.50	24.14	21.61	28.85	24.90	27.47	23.60
June . . .	24.59	22.10	24.50	22.08	24.30	22.00	28.80	25.39
July . . .	23.93	20.52	23.93	20.70	23.80	20.73	27.25	22.50
Season . . .	28.85	19.98	31.35	20.00	31.59	20.00	30.74	19.95
<i>Season of 1923-24</i>								
August, 1923 . . .	24.98	20.73	25.05	20.80	25.02	20.77	24.70	22.05
September . . .	29.12	24.30	29.10	24.43	29.17	24.43	28.40	24.13
October . . .	30.48	26.52	30.48	26.55	30.48	26.59	29.93	26.05
November . . .	37.05	29.60	37.11	29.65	37.23	29.60	36.50	29.30
December . . .	36.56	32.45	36.78	32.90	36.90	33.00	35.95	32.30
January, 1924 . . .	35.25	32.15	35.50	32.37	35.65	32.60	34.58	31.52
February . . .	27.85	25.20	34.67	28.15	34.97	28.52	33.60	28.02
March . . .	25.37	22.85	29.40	26.44	29.70	26.45	28.97	25.85
April . . .	25.04	23.02	25.06	23.19	31.95	27.95	30.45	26.90
May . . .	26.25	23.00	26.37	23.25	32.30	29.25	30.02	27.55
June . . .	26.50	23.83	26.65	23.97	26.25	24.04	30.50	27.75
July . . .	28.98	22.98	29.06	23.17	29.15	23.30	35.40	28.50
Season . . .	37.05	20.73	37.11	20.80	37.23	20.77	36.50	22.05
<i>Season of 1924-25</i>								
August, 1924 . . .	28.38	23.74	28.64	24.05	28.72	24.23	27.50	23.75
September . . .	25.25	21.20	25.45	21.50	25.62	21.72	25.25	21.40
October . . .	25.95	22.18	26.20	22.50	26.40	22.70	26.00	22.45
November . . .	25.14	22.63	25.45	22.95	25.77	23.18	25.44	22.98
December . . .	24.73	22.66	25.15	23.05	25.50	23.40	25.51	23.51
January, 1925 . . .	24.55	23.30	24.83	23.06	25.13	23.39	25.25	23.61
February . . .	25.33	24.00	25.38	23.85	25.65	24.19	25.88	24.43
March . . .	25.45	23.74	25.98	24.92	26.25	24.22	26.38	24.50
April . . .	24.95	23.55	25.05	23.73	24.93	23.68	25.27	23.92
May . . .	23.92	21.40	24.07	21.62	24.24	21.65	24.36	21.70
June . . .	23.70	21.68	24.00	21.96	24.22	22.45	24.09	22.40
July . . .	25.10	22.40	25.40	22.72	25.63	22.94	24.62	22.70
Season . . .	28.38	21.20	28.64	21.50	28.72	21.65	27.50	21.40

Options on the New York Cotton Exchange

AUGUST DELIVERY		SEPTEMBER DELIVERY		OCTOBER DELIVERY		DECEMBER DELIVERY		DURING MONTH OF —
High	Low	High	Low	High	Low	High	Low	
22.65	20.50	22.68	20.17	23.00	20.00	23.00	20.05	<i>Season of 1922-23</i>
—	—	21.25	20.84	22.86	20.00	23.05	20.26	August, 1922
—	—	—	—	23.95	20.15	24.55	20.50	September
25.04	23.85	24.90	23.20	24.30	22.60	26.80	23.88	October
25.30	24.30	25.00	25.00	24.89	22.51	26.20	24.05	November
28.25	25.83	27.00	25.12	26.77	24.38	26.48	24.31	December
28.35	26.50	26.82	25.85	26.32	24.74	25.95	24.50	January, 1923
29.62	26.78	27.45	24.85	27.20	24.40	26.82	23.87	February
28.00	25.37	26.43	24.40	26.17	23.75	25.60	23.28	March
26.65	22.90	25.05	22.85	24.98	22.12	24.48	21.78	April
28.20	24.75	26.07	23.70	25.50	22.70	24.93	22.33	May
26.25	20.85	25.00	21.15	24.60	20.82	24.15	20.68	June
								July
29.62	20.50	27.45	20.17	27.20	20.00	26.82	20.05	Season
								<i>Season of 1923-24</i>
25.46	21.40	25.25	22.80	25.35	21.07	25.27	20.92	August, 1923
—	—	30.30	24.63	30.30	24.68	29.90	24.61	September
28.35	26.97	27.60	25.00	31.30	27.45	31.05	27.12	October
34.50	27.90	31.00	27.90	30.00	26.27	37.70	30.28	November
33.60	29.90	30.65	27.82	29.64	27.00	37.15	33.20	December
32.00	29.50	29.50	28.35	28.83	27.64	28.40	27.20	January, 1924
30.40	27.30	28.70	26.60	28.87	25.80	28.25	25.45	February
27.89	25.35	26.50	24.20	26.17	23.45	25.74	23.15	March
28.20	25.50	26.88	24.95	26.01	23.87	25.40	23.30	April
28.05	26.00	27.70	24.50	27.22	23.84	26.38	23.28	May
28.15	26.10	26.75	25.38	27.50	24.70	26.75	24.02	June
30.30	25.85	29.50	24.60	29.97	23.74	29.10	23.11	July
34.50	21.40	31.00	22.80	31.30	21.07	37.70	20.92	Season
								<i>Season of 1924-25</i>
28.50	25.80	28.59	24.27	29.23	24.05	28.53	23.75	August, 1924
—	—	24.55	23.60	26.25	21.50	25.20	21.17	September
23.25	22.45	22.67	21.80	26.68	22.61	25.90	22.09	October
24.78	23.00	24.00	22.20	24.20	21.50	24.95	22.55	November
25.00	24.10	25.05	22.95	24.85	22.52	23.80	22.52	December
24.10	23.97	24.32	24.32	24.39	23.40	24.31	23.36	January, 1925
25.56	24.60	25.24	25.08	25.51	24.17	25.55	24.20	February
25.78	25.18	25.68	25.13	25.71	23.92	25.72	23.93	March
25.07	24.03	25.20	24.10	25.15	23.65	25.25	23.82	April
23.60	21.75	24.20	21.75	24.04	21.55	24.24	21.72	May
24.12	22.00	23.83	22.20	24.17	21.87	24.25	22.07	June
25.04	22.78	24.86	23.00	25.55	22.81	25.70	22.95	July
28.50	21.75	28.59	21.75	29.23	21.50	28.53	21.17	Season

Comparative Prices of Foreign Cotton

[January 1 quotations at Liverpool]

Pence per pound

	1926	1925	1924	1923	1914
American, middling . . .	9.81	13.57	21.06	15.40	7.15
Egyptian:					
FGF Sak	17.00	30.15	24.50	17.80	10.55
FGF Upper	14.30	19.80	22.60	—	—
FGF Brown	15.40	22.10	23.10	—	—
Indian:					
Fine Broach	8.85	12.45	18.00	13.00	6.62
Fine Oomra, No. 1 . . .	8.35	12.40	16.10	11.25	6.12
Fine Bengal	7.75	11.90	14.70	9.20	5.46
Fine Surtee	9.30	13.20	18.60	—	—
South American:					
Fair Peruvian	14.00	14.82	21.46	15.05	7.34
Fair Parahyba	10.31	14.82	20.83	—	—
Fair Sao Paulo	9.31	13.82	20.38	—	—

Monthly High and Low Prices of Middling Upland Spot Cotton at New York

Source: New York Cotton Exchange

	1917-18		1918-19		1919-20		1920-21		1921-22		1922-23		1923-24		1924-25	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
August . . .	28.00	23.10	37.30	29.70	35.70	30.55	40.00	31.75	16.60	12.80	23.20	20.35	26.35	23.50	31.50	25.90
September . .	26.30	21.20	38.20	32.65	32.85	28.85	32.25	25.50	21.55	17.50	22.25	20.35	30.75	25.95	26.10	22.15
October . . .	29.90	25.25	34.45	30.20	38.55	31.10	25.25	20.50	21.35	18.50	24.35	20.45	31.80	28.20	26.90	22.50
November . .	31.25	28.75	31.60	27.75	40.20	38.40	22.50	15.50	19.00	16.70	26.80	24.45	37.60	31.25	24.85	23.60
December . .	31.85	29.85	33.00	27.50	40.25	38.00	16.70	14.50	19.45	17.50	26.80	24.55	37.65	33.70	24.90	23.15
January . . .	33.30	31.50	32.40	25.60	39.75	38.75	18.25	14.30	19.05	16.45	28.75	26.45	35.70	32.90	24.30	23.45
February . .	32.65	31.20	27.85	25.00	40.10	37.55	14.20	11.25	18.85	16.85	30.15	27.40	34.85	29.00	25.35	24.25
March . . .	35.05	32.70	28.70	26.10	43.25	40.25	12.55	11.20	18.70	17.80	31.30	28.75	29.25	26.80	26.05	24.60
April . . .	36.00	26.75	29.65	28.30	43.25	41.25	12.45	11.65	18.35	17.75	30.05	27.30	31.65	28.50	24.95	24.00
May . . .	30.10	25.70	34.00	28.75	43.00	40.00	13.15	12.45	21.80	18.95	28.90	25.30	32.85	30.05	24.40	22.20
June . . .	32.30	29.00	34.95	30.35	40.00	37.75	12.95	10.85	23.30	20.75	29.90	27.25	32.75	28.75	24.80	23.35
July . . .	34.10	28.55	36.60	33.40	43.75	39.25	12.85	11.95	23.75	21.45	28.05	22.45	35.30	29.60	25.90	23.80
Season . . .	36.00	21.20	38.20	25.00	43.75	28.85	40.00	10.85	23.75	12.80	31.30	20.35	37.65	23.50	31.50	22.15

Prices of Extra Staple Cotton, 1925

Source: Daily News Record

	AMERICAN STAPLES ¹				EGYPTIANS ¹			Pima ² No. 2	Peru- vian ¹ Mitaffi	Tanguis ³ Strict Middling	New York Middling Spots
	1½-Inch	1¾-Inch	1½-Inch	1¾-Inch	Uppers Medium	Saks'— Medium	Saks'— High Grade				
Jan. 2	30½-31½	31½-32½	33-34½	37	36-37½	58-60	60	60 ⁴	38½-40½	37	24.20
Jan. 6	31½-32	32½-33	33½-35	36	36-37½	58½-60	63	60 ⁴	38½-41	37	24.20
Jan. 21	30½-31½	32-33	34-36	39	37½-39	56½-59	62	60 ⁴	40-42	37	24.00
Jan. 24	31-31½	32-33	34-36	39	38½-43	61-64	66	60 ⁴	39½-42	37	23.55
Jan. 27	31½-32½	33-34	35-37	39½	38-42	61-63	66	60 ⁴	39½-42	37	23.65
Jan. 29	32-33	33-34½	35½-37½	40	38-41	62-65	66	60 ⁴	39½-42	37	23.95
Feb. 2	31-32	32-33½	36-38	40	37-40	64-68	70	60 ⁴	38-41	37	24.50
Feb. 14	32½-33½	33½-35½	36½-38½	40	38½-40½	66-69	73	60-65	39½-41	38	24.55
Feb. 18	33½-34½	34½-35½	38-40½	41½	36½-39	56-62	64	60 ⁴	38-41	38	24.70
Feb. 24	33-34	34-35	38½-40	42	36-39	60-68	70	60 ⁴	38-41	38	24.80
Feb. 26	33½-34½	34½-35½	39-40½	42	36-39	60-68	70	60 ⁴	38-40½	38	25.35
Mar. 3	33½-34½	35-36	39½-40½	42	36½-39	62-69	70	60 ⁴	38-41	38	26.05
Mar. 6	34-35	35½-36½	39½-41	42½	37½-40	63-71	73	60 ⁴	38-41½	38	25.95
Mar. 10	34-35	35-36	39½-41½	43½	37½-41	62-70	73	65-68 ⁴	38-41½	38	26.05
Mar. 17	34½-35	35½-37	41-43	45	38-42	62-70	80	70 ⁴	39-41	38	25.60
Mar. 24	34-35½	35½-37	39½-42	44	39-42	66-67	87	70 ⁴	39-41½	39	25.50
Mar. 31	34½-35	35-36½	42-43½	45	38-40½	62-74	84	70 ⁴	39½-42	38	24.80
Apr. 4	34½-35½	35½-36½	41½-43	44½	37½-40	62-72	82	70 ⁴	40-42½	37	24.40
Apr. 9	33½-34½	35-36½	41-43	44	37-39	60-65	78	65 ⁴	39-41	38	24.40
Apr. 13	34-35	35½-36½	42-43½	44	37-38½	62-68	75	65 ⁴	39-42	38	24.40
Apr. 25	34½-35	36-37½	39½-42	45	37½-38½	62-68	72	65 ⁴	40-43	38	24.45
Apr. 28	34-35	36½-37½	40-42½	45	37-39	62-68	72	65 ⁴	40-43	38	24.00
May 1	34-35	36½-37½	40-42	45	37-39	62-67	70	65 ⁴	40-43	38	24.40
May 9	34-35	35-37	38½-41½	44	37-39	64-68	74	65 ⁴	40-43	38	23.30
May 19	32-32½	33½-34½	38½-40½	41½	35-37	62-66	68	65 ⁴	39-42	38½	23.40
May 26	32-33	33½-35	39½-40½	42½	35-36½	63-64	70	65 ⁴	39½-42	36½	23.95
May 28	31½-32½	33½-34½	39-40	42½	34-36	62-66	68	65 ⁴	39½-42	36½	23.75
June 1	31½-32½	34-35½	39-40½	42	34-35	61-66	68	65 ⁴	39-42	36½	23.65
June 8	32-33	33½-35	37½-39½	40	32-34	60-66	72	65 ⁴	40-42½	35½	23.55
June 13	31-32	33½-35	36-38	38½	32-34½	60-65	70	65 ⁴	40-43	35½	23.80
June 23	32-33	33½-34½	37½-38½	39	33½-35½	62½-66	70	65 ⁴	41-44	35½	21.20
June 30	33½-34½	34½-35½	38-39	39½	34½-36	64-66	70	65 ⁴	41-44	38	24.80

¹ New Bedford basis.² New England basis.³ New York basis.⁴ Nominal.

Prices of Extra Staple Cotton, 1925 — (Concluded)

Source: Daily News Record

	AMERICAN STAPLES ¹				EGYPTIANS ¹			Pima ² No. 2	Peru- vian ¹ Mitafifi	Tanguis ³ Strict Middling	New York Middling Spots
	1½-Inch	1½-Inch	1½-Inch	1½-Inch	Uppers Medium	Saks' Medium	Saks' High Grade				
July 8 . . .	32½-34	34-35½	39-41½	41½	34½-36½	62-67	70	65	41½-44½	38	24.65
July 18 . . .	32-33	34-35	38-39½	39½	34-36	62-66	67	65 55½	41-44	38	24.50
July 22 . . .	31½-32	32½-33½	36½-38	38½	34-36	62-65	66	68s 54½	41-44	38	24.10
July 28 . . .	33-34	34½-35	37½-39	39½	35-37	64-68	69	68s 54½	41½-45	38	25.55
July 31 . . .	32-32½	33-34	37-38	39	34½-36½	62-65	67	66s	41-44	38	24.85
Aug. 8 . . .	30½-32	32-35½	36-38	38	35-37	64-66	69	54½ 67s	41-44½	38	24.35
Aug. 14 . . .	32-33	33-34	38-39½	41½	35-37	66-68	70	54½ 65s	40½-44	38	23.75
Aug. 19 . . .	30-31	31½-32	35½-37	38-39	35-37	66-68	70	54½ 65s	42-44	38	23.60
Aug. 22 . . .	29-30	30-31	33-34	35½-36½	35-36	66-68	69½	65s 54½	39	38	23.65
Aug. 29 . . .	28½-30	30-30½	33-34½	35½	34½-36	67-68	69	65s	39½-41	38	22.60
Sept. 5 . . .	28½-29½	30-31	33-34½	35	34-36	48-50	51	51	39-41½	37	.....
Sept. 8 . . .	27½-28½	28½-29	31½-32½	34	33½-34	47½-48	50	54	39-40	37	23.30
Sept. 12 . . .	29-30	30-31	34-35½	36½	34-35½	53-55	56	55	39½-42	37	24.25
Sept. 14 . . .	28½-30	30-31	34-35½	36½	34-35	50½-51	52	54	39½-42	37	24.75
Sept. 25 . . .	30-30½	31-31½	34-35	37	34-35	50-52	54	56	39-41½	37	23.90
Sept. 29 . . .	29½-30	30½-31	34½-36	36½	34-35	49-51½	53	56	39-42	36½	23.50
Oct. 5 . . .	28½-29½	30-30½	33-34½	36	34-35	46½-48	49½	55½	39-41½	36½	23.15
Oct. 15 . . .	27-28	28-29	31½-34	36½	31½-33	45-46½	49	51	39-41	36½	21.60
Oct. 17 . . .	27½-28½	28½-29½	31½-33½	36½	32-33	45-47	49	51	39½-42	36½	21.80
Oct. 23 . . .	27-28	28½-29	33½-35½	38	32½-33½	43½-45	46	51	39-41	36½	21.80
Oct. 27 . . .	27-27½	28-28½	33-34	37½	31-32	42-44	46	53	39-41	36½	20.70
Oct. 30 . . .	27-28	28-29½	32½-34	37	31-32½	41½-43	45	51	39-41	36½	19.75
Nov. 2 . . .	26-26½	27-28	30½-32	36½	31-32	41-42	44	51	38½-40	35	19.90
Nov. 7 . . .	27-28	28-29½	32-34	38½	32-33½	42-43½	45	53	39-41½	35	19.95
Nov. 10 . . .	26½-28	28-29	31½-34	37	29½-30½	40-41	43	53	38-40	35	20.50
Nov. 14 . . .	28-28½	28½-29½	32-34½	36½	30½-31½	40-41	43	49	37-39	35	21.00
Nov. 28 . . .	29-30	30½-31½	33½-35½	37	29½-31	38-40	41	48	36½-39	35½	21.00
Dec. 1 . . .	29-30½	31-32	34-35½	37½	30½-31½	39-40	41	48	37-39	35½	20.75
Dec. 7 . . .	29-29½	29½-31	35-36	38	30-31	38-39	40	44	37-39	35½	20.55
Dec. 11 . . .	28-28½	29-30	34-35½	37	29½-30½	37-40	41	43	36-37½	35½	19.70
Dec. 22 . . .	28½-29	29-30	33½-36	36½	26½-27½	34½-36	37½	38	35-37	35½	19.15
Dec. 28 . . .	28-29	29-30	34-36	37	26½-27½	35-37	36½	39-40	35-37	35½	20.65

¹ New Bedford basis.² New England basis.³ New York basis.⁴ New crop.

Relative Wholesale Prices of Cotton Yarn and Cotton Fabrics in Comparison with Other Groups of Commodities, from 1916 to 1926

[Prices of 1913, represented by 100, taken as basis]

Source: United States Bureau of Labor Statistics

	Cotton Yarn 10-1 Carded	Pepperell Brown Sheeting 4-4	Lonsdale Bleached Muslin 4-4	Farm Prod- ucts	Foods	Fuel and Light- ing	Metals and Metal Prod- ucts	Build- ing Ma- terials	Chem- icals and Drugs	House Fur- nish- ing Goods	All Com- modi- ties
Average of 1913	100	100	100	100	100	100	100	100	100	100	100
January, 1916	94.9	95.5	97.0	110	109	113	133	110	184	103	113
April, 1916	101.7	102.3	103.1	113	114	120	164	120	200	104	121
July, 1916	114.1	105.7	106.2	117	117	121	158	120	175	107	123
October, 1916	135.6	133.0	121.3	136	134	128	164	124	164	109	136
January, 1917	153.6	150.1	133.4	152	140	171	198	138	173	118	153
April, 1917	162.7	163.7	136.5	184	164	164	230	155	186	121	173
July, 1917	203.3	191.0	194.1	196	169	176	292	168	205	129	188
October, 1917	189.8	197.8	206.2	207	180	153	207	156	231	130	183
January, 1918	242.3	232.6	218.3	211	182	164	183	161	223	137	184
April, 1918	278.4	327.4	279.0	213	181	166	184	169	228	144	190
July, 1918	289.7	-1	303.2	217	185	175	189	177	209	159	196
October, 1918	275.6	274.6	303.2	225	198	176	192	177	211	164	202
January, 1919	201.3	260.6	258.5	224	203	178	175	176	181	167	199
April, 1919	188.5	204.6	218.1	230	205	177	153	169	160	167	199
July, 1919	267.1	299.0	338.5	241	210	181	160	209	167	183	212
October, 1919	276.1	313.0	363.9	227	205	189	162	229	173	194	211
January, 1920	328.6	389.1	399.9	247	231	194	175	274	189	239	233
April, 1920	351.7	-1	412.4	243	238	231	203	300	210	242	245
July, 1920	316.7	-1	412.4	233	238	259	202	269	212	275	241
October, 1920	196.3	274.2	296.2	187	201	280	191	240	198	271	211
January, 1921	130.1	165.6	190.8	143	162	247	153	192	153	217	170
April, 1921	107.9	136.4	188.0	117	144	205	138	167	135	216	148
July, 1921	108.9	136.4	169.8	119	141	186	124	160	129	180	141
October, 1921	173.2	184.2	200.1	124	140	189	116	159	131	180	142
January, 1922	147.3	160.3	181.9	122	131	195	112	157	124	178	138
April, 1922	141.7	153.5	169.8	129	137	194	113	156	124	175	143
July, 1922	170.7	174.8	182.3	135	142	254	121	170	121	173	155
October, 1922	176.5	183.9	194.1	138	140	226	135	183	124	176	154
January, 1923	196.7	199.3	202.7	143	141	218	133	188	131	184	156
April, 1923	202.4	211.5	212.2	141	144	200	154	204	136	187	159
July, 1923	182.5	197.8	194.1	135	141	183	145	190	128	187	151
October, 1923	208.1	204.6	200.1	144	148	172	142	182	129	183	153
January, 1924	233.4	225.1	218.3	144	143	169	142	181	132	176	151
April, 1924	202.3	211.5	206.2	139	137	179	139	182	128	175	148
July, 1924	197.8	211.5	201.7	134	136	175	132	173	127	172	147
October, 1924	187.7	204.6	206.2	143	148	168	128	171	131	171	152
January, 1925	183.6	201.2	206.2	163	160	168	136	179	135	173	160
April, 1925	173.3	201.2	209.3	153	154	169	129	174	134	171	156
July, 1925	174.3	177.4	180.3	162	157	172	126	170	133	169	160
October, 1925	179.4	180.8	200.1	155	158	172	128	174	135	168	158

1 No quotation.

Actual Prices of Cotton in Comparison with Other Basic Raw Materials, from 1916 to 1926

Source: United States Bureau of Labor Statistics

	Cotton Middling Upland (per Pound)	Wool 4-1 Grades Scoured (per Pound)	Wheat No. 1 Northern (per Bushel)	Corn Contract Grade (per Bushel)	Cattle Good to Choice Steers (per 100 Pounds)	Copper Electro- lytic (per Pound)	Iron Bessemer, Pig (per 2,240 Pounds)	Coal, Bitu- minous (per 2,000 Pounds)
Average of 1913	\$0.128	\$0.471	\$0.874	\$0.625	\$8.507	\$0.157	\$17.133	\$2.200
January, 1916 .	.124	.643	1.289	.761	8.666	.229	21.580	2.200
April, 1916 .	.121	.686	1.217	.760	9.119	.269	21.950	2.200
July, 1916 .	.130	.686	1.170	.808	9.985	.265	21.950	2.200
October, 1916 .	.181	.682	1.757	.955	9.905	.285	24.080	3.750
January, 1917 .	.176	.872	1.917	.982	10.531	.295	35.950	4.500
April, 1917 .	.208	1.000	2.382	1.397	12.310	.340	42.200	5.000
July, 1917 .	.261	1.200	2.582	2.044	12.360	.318	57.450	5.000
October, 1917 .	.281	1.382	2.170	1.968	14.675	.235	37.250	3.300
January, 1918 .	.324	1.455	2.170	1.775	13.113	.235	37.250	3.600
April, 1918 .	.317	1.455	2.170	1.665	15.175	.235	36.150	3.600
July, 1918 .	.312	1.437	2.170	1.665	17.625	.255	36.600	4.100
October, 1918 .	.325	1.437	2.216	1.385	17.856	.260	36.600	4.100
January, 1919 .	.296	1.200	2.223	1.401	18.413	.204	33.600	4.100
April, 1919 .	.290	1.091	2.589	1.609	18.325	.153	29.350	4.000
July, 1919 .	.351	1.236	2.680	1.920	16.869	.215	29.350	4.000
October, 1919 .	.355	1.236	2.625	1.400	17.594	.217	29.350	4.500
January, 1920 .	.393	1.236	2.931	1.503	15.938	.193	40.400	4.100
April, 1920 .	.424	1.200	3.006	1.706	13.906	.192	43.650	5.500
July, 1920 .	.410	.909	2.831	1.549	15.381	.190	47.150	6.000
October, 1920 .	.226	.727	2.106	.888	14.688	.168	49.210	7.100
January, 1921 .	.167	.546	1.788	.682	9.840	.129	33.960	5.600
April, 1921 .	.121	.527	1.406	.578	8.719	.125	26.960	4.850
July, 1921 .	.124	.491	1.438	.614	8.406	.125	22.835	4.600
October, 1921 .	.197	.473	1.319	.470	8.875	.127	21.960	4.100
January, 1922 .	.179	.582	1.300	.484	8.150	.136	21.560	3.750
April, 1922 .	.181	.727	1.563	.588	8.406	.126	22.585	3.600
July, 1922 .	.223	.818	1.423	.643	9.700	.137	26.770	5.390
October, 1922 .	.228	.836	1.132	.691	10.245	.137	35.170	6.390
January, 1923 .	.275	.982	1.221	.711	9.780	.146	29.270	5.640
April, 1923 .	.290	1.018	1.279	.793	9.015	.169	32.770	4.890
July, 1923 .	.259	1.000	1.084	.857	10.590	.144	28.464	3.890
October, 1923 .	.301	.946	1.172	1.011	10.450	.126	26.960	3.890
January, 1924 .	.347	.982	1.151	.759	9.469	.126	24.760	3.640
April, 1924 .	.299	.964	1.131	.790	10.775	.133	24.560	3.390
July, 1924 .	.291	.873	1.296	1.055	9.563	.124	21.960	3.390
October, 1924 .	.245	1.055	1.434	1.105	9.500	.130	21.760	3.390
January, 1925 .	.240	.700	1.819	1.271	10.594	.148	24.635	3.390
April, 1925 .	.243	.550	1.549	1.082	9.988	.133	22.885	3.390
July, 1925 .	.243	.520	1.591	1.065	11.563	.149	18.000	3.390
October, 1925 .	.211	.530	1.549	.828	11.903	.143	18.625	3.390

Relative Prices of Cotton in Comparison with Other Basic Raw Materials, from 1916 to 1926

[Prices of 1913, represented by 100, taken as basis]

Source: United States Bureau of Labor Statistics

	Cotton Middling (Upland)	Wool $\frac{1}{2}$ - $\frac{3}{4}$ Grades Scoured	Wheat No. 1 Northern	Corn Contract Grade	Cattle Good to Choice Steers	Copper Electro- lytic	Iron Bessemer, Pig	Coal, Bitu- minous
Average of 1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
January, 1916	97.0	136.5	147.6	121.8	101.9	145.5	126.0	100.0
April, 1916	94.3	145.6	139.3	121.6	107.2	170.9	128.1	100.0
July, 1916	101.6	145.6	133.9	129.3	117.4	168.8	128.1	100.0
October, 1916	141.7	145.6	201.1	152.8	116.4	181.2	140.6	170.5
January, 1917	137.8	182.3	219.4	157.1	123.8	187.5	209.8	204.5
April, 1917	159.0	208.8	272.6	223.5	144.7	216.1	246.3	227.3
July, 1917	203.9	254.8	295.4	327.0	147.6	202.5	335.3	227.3
October, 1917	219.9	288.8	248.4	314.8	172.5	149.4	217.4	150.0
January, 1918	253.1	308.9	248.3	284.0	154.1	149.7	217.4	162.7
April, 1918	247.7	308.9	248.3	266.4	178.4	149.7	211.0	162.7
July, 1918	243.8	305.1	248.3	266.4	207.2	162.4	213.6	186.4
October, 1918	253.9	305.1	253.5	221.6	209.9	165.6	213.6	186.4
January, 1919	231.3	254.8	254.3	224.2	216.4	129.9	196.1	186.4
April, 1919	226.6	231.6	296.2	257.4	215.4	97.5	171.3	181.8
July, 1919	274.2	262.4	306.6	307.2	198.3	136.9	171.3	181.8
October, 1919	277.3	262.4	300.3	224.0	206.8	138.2	171.3	204.5
January, 1920	307.1	258.4	335.6	240.4	187.3	122.8	235.8	186.4
April, 1920	331.4	250.6	344.2	273.0	163.5	122.0	254.8	250.0
July, 1920	320.6	189.9	324.1	247.8	180.8	120.8	275.2	272.7
October, 1920	176.8	151.9	241.1	142.0	172.7	106.5	287.2	322.7
January, 1921	130.6	114.0	204.7	109.1	115.7	81.9	198.2	254.5
April, 1921	94.9	110.1	160.9	92.5	102.5	79.3	157.4	220.5
July, 1921	96.6	102.6	164.7	98.2	98.8	79.7	133.3	209.1
October, 1921	154.0	98.7	151.0	75.1	104.3	80.6	128.2	186.4
January, 1922	140.0	121.6	148.8	77.4	95.8	86.1	125.8	170.5
April, 1922	141.5	151.9	178.9	94.1	98.8	80.3	131.8	163.6
July, 1922	174.6	170.9	162.8	102.8	114.0	87.2	156.3	245.0
October, 1922	178.0	174.8	129.6	110.6	120.4	87.0	205.3	290.5
January, 1923	214.7	205.2	139.8	113.7	115.0	92.5	170.8	256.4
April, 1923	226.3	212.7	146.4	126.8	106.0	107.5	191.3	222.3
July, 1923	202.3	208.8	124.1	137.1	124.5	91.7	166.1	176.8
October, 1923	234.9	197.6	134.2	161.7	122.8	80.3	157.4	176.8
January, 1924	271.4	205.2	131.7	121.3	111.3	80.1	144.5	165.5
April, 1924	233.6	201.3	129.5	126.4	126.7	84.2	143.4	154.1
July, 1924	229.1	182.3	148.4	168.7	112.4	78.5	128.2	154.1
October, 1924	191.6	220.2	164.2	176.8	111.7	82.6	127.0	154.1
January, 1925	188.0	266.0	208.2	203.3	118.7	94.0	143.8	154.1
April, 1925	191.6	208.9	169.6	173.1	117.4	84.8	133.6	154.1
July, 1925	190.9	197.7	174.3	170.3	135.9	88.8	121.2	154.1
October, 1925	165.8	201.4	169.7	132.4	140.0	91.2	114.2	154.1

Prices of Staple Cotton Yarns in the United States on First of Each Quarter during Years 1914 to 1925, inclusive

[Prices are per pound]

Source: Daily News Record and Textile World

DATE	10s Single Southern Carded Frame Cones	20/2 Southern Carded Skeins	60/2 Eastern Combed Peeler Warps
January 1, 1914	\$0 21½ to \$0 21¾	\$0 23 to \$0 23½	\$0 53 to \$0 59
April 1, 1914	21 to 21¼	23 to 23½	53 to 59
July 1, 1914	21 to 21½	22 to 22½	51 to 57
October 1, 1914	15¾ to 17½	17 to 18	50 to 56
January 1, 1915	14 to 15	16½ to 17½	44 to 49
April 1, 1915	15 to 16½	16½ to 18	48 to 53
July 1, 1915	15½ to 17½	17 to 19	51 to 56
October 1, 1915	18 to 19	21 to 22	56 to 59
January 1, 1916	20 to 22	25 to 27	61 to 66
April 1, 1916	20½ to 22	26 to 27	66 to 71
July 1, 1916	23¼ to 24	28 to 31	76 to 81
October 1, 1916	29 to 31	33½ to 35	97 to 1 02
January 1, 1917	35 to 37	39 to 41	1 10 to 1 15
April 1, 1917	34 to 36	36½ to 38	93 to 95
July 1, 1917	44 to 46	43 to 46	1 10 to 1 15
October 1, 1917	41 to 42	42 to 45	1 10 to 1 15
January 1, 1918	50 to 52	55 to 58	1 20 to 1 25
April 1, 1918	60 to 61	67 to 68	1 20 to 1 25
July 1, 1918	61 to 63	71 to 73	1 20 to 1 25
October 1, 1918	61 to 63	73 to 75	1 20 to 1 25
January 1, 1919	50 to 53	62 to 65	1 20 to 1 30
April 1, 1919	41 to 43	46 to 50	1 05 to 1 10
July 1, 1919	55 to 57	67 to 69	1 55 to 1 60
October 1, 1919	60 to 63	70 to 72½	1 90 to 1 95
January 1, 1920	69 to 73	84 to 85	3 50
April 1, 1920	74 to 77	90 to 92	3 75
July 1, 1920	70 to 75	80 to 85	2 50
October 1, 1920	42 to 45	50 to 55	1 50
January 1, 1921	28 to 29	31 to 32	85
April 1, 1921	21 to 22	23 to 24	80
July 1, 1921	21 to 22	22½ to 23	85 to 95
October 1, 1921	35 to 37	36½ to 38	1 10
January 1, 1922	30½ to 31	33½ to 34	1 10
April 1, 1922	28½	31½	1 05
July 1, 1922	35	39	1 05
October 1, 1922	34 to 34½	38 to 38½	1 00
January 1, 1923	41½ to 42	49 to 49½	1 10 to 1 18
April 1, 1923	45½	54	1 05 to 1 15
July 1, 1923	39 to 39½	44½ to 45	95 to 1 05
October 1, 1923	44	49½ to 50	95 to 1 00
January 1, 1924	50	55	1 05 to 1 15
April 1, 1924	40½	44 to 44½	78 to 82
July 1, 1924	40	43½	74 to 78
October 1, 1924	40	44 to 44½	74 to 77
January 1, 1925	39	44½	77 to 80
April 1, 1925	39	43	76 to 79
July 1, 1925	36	38 to 38½	70 to 74
January 1, 1926	33½ to 34	36	68 to 72

Prices of Carded Warp Yarns and Spot Cotton in the United States, Week by Week, during the Year 1924

[Prices are per pound]

Compiled by Frederick B. Macy & Co., New Bedford

DATE	CARDED SINGLE WARPS				CARDED TWO-PLY WARPS				Mid-up Spot Cotton, New York (in Cents)	Staple Cotton, 1 ¹ / ₈ In- ches (in Cents) ¹	
	8s	20s	30s	40s	8s	20s	30s	40s			
January	2	\$0 41	\$0 45	\$0 50	\$0 55	\$0 41	\$0 47	\$0 52	\$0 57	24.20	32 ³ / ₄
	9	41	45	51	55	41	47	52	57	24.15	32 ¹ / ₂
	16	40	45	51	55	41	47	52	57	24.00	32 ¹ / ₂
	23	40	44	50	55	41	46	52	56	23.45	33 ¹ / ₂
	30	40	44	50	54	41	46	52	56	23.90	33 ¹ / ₂
February	6	40	44	50	56	41	45	52	58	24.25	34
	13	39	43	49	58	39	44	50	60	24.75	34 ¹ / ₂
	20	38	43	49	58	39	44	50	60	24.50	34 ¹ / ₂
	27	37	43	49	58	39	44	50	60	26.05	34 ¹ / ₂
March	6	37	43	49	58	40	45	51	60	25.95	36
	13	38	44	50	59	40	45	52	60	25.50	36
	20	38	44	50	59	40	46	52	60	25.95	36 ¹ / ₄
	27	38	44	50	59	40	46	51	60	25.20	36 ¹ / ₂
April	3	38	44	50	59	40	46	51	60	24.55	36
	10	38	44	50	58	39	46	50	59	24.35	35 ¹ / ₂
	17	38	41	49	57	39	45	50	58	24.45	36
	24	38	41	48	57	39	44	48	58	24.50	37
May	1	38	41	48	57	39	44	48	58	24.40	36
	8	38	41	47	57	39	42	47	58	23.35	35 ¹ / ₂
	15	37	40	45	56	37	41	46	57	22.65	33 ³ / ₄
	22	38	40	45	55	37	41	46	56	23.50	34
	29	38	41	45	55	38	42	46	56	23.75	34 ¹ / ₂
June	5	38	40	45	55	38	41	46	56	24.70	34 ¹ / ₄
	12	36	39	44	54	37	40	45	55	23.65	33 ¹ / ₂
	19	36	39	44	54	37	40	45	55	24.15	34
	26	36	39	44	54	37	40	45	54	24.45	34 ¹ / ₂
July	3	36	39	44	54	37	40	45	54	23.80	34 ¹ / ₄
	10	36	39	44	54	37	40	45	54	24.24	34
	17	36	39	43	54	37	40	44	54	24.40	33 ¹ / ₂
	24	36	39	45	54	37	41	44	54	25.30	33 ¹ / ₂
	31	38	42	45	55	39	43	46	56	24.85	33 ¹ / ₂
August	7	38	42	45	55	39	43	46	56	24.55	33 ¹ / ₂
	14	37	42	45	55	39	43	46	56	23.50	31 ¹ / ₂
	21	37	42	45	54	38	42	45	55	23.55	30 ¹ / ₂
	28	37	42	44	54	37	42	45	55	22.85	30
September	4	37	42	44	54	37	42	45	55	22.65	30
	11	37	42	45	56	38	43	46	56	23.95	29
	18	38	42	46	57	39	43	48	58	24.45	32
	25	39	43	48	58	40	44	51	60	23.90	31
October	2	39	43	48	58	40	44	51	60	23.15	30 ¹ / ₄
	9	39	43	48	58	40	44	51	60	22.10	29
	16	39	42	47	56	40	43	50	59	21.60	29
	23	39	42	46	55	40	43	50	58	21.80	28 ¹ / ₂
	30	38	42	46	54	39	43	49	57	19.75	27 ¹ / ₂
November	7	37	42	46	54	38	42	49	57	20.80	29
	13	36	42	46	55	37	42	49	57	20.90	30 ¹ / ₂
	20	36	42	46	55	37	41	48	57	20.80	30 ³ / ₂
	29	36	42	46	55	37	42	48	57	21.00	31 ¹ / ₂
December	4	36	42	46	55	37	42	48	57	20.75	30
	11	36	42	46	55	37	42	48	57	19.70	30
	18	36	41	46	55	37	42	48	57	19.35	29 ¹ / ₂
	26	35	40	45	55	36	42	47	57	20.65	29

¹ New Bedford basis.

Prices of Combed Warp Yarns and Spot Cotton in the United States, Week by Week, during the Year 1924

[Prices are per pound]

Source: Frederick B. Macy & Co., New Bedford

DATE	COMBED SINGLE WARPS				COMBED TWO-PLY WARPS				Mid-up Spot Cotton, New York (in Cents)	Staple Cotton, 1 ¹ / ₈ In- ches (in Cents) ¹
	30s	40s	50s	60s	30s	40s	50s	60s		
January 2	\$0 70	\$0 80	\$0 95	\$1 00	\$0 75	\$0 90	\$1 10	\$1 15	24.20	32 ³ / ₄
9	70	80	95	1 10	75	90	1 10	1 25	24.15	32 ¹ / ₂
16	70	80	95	1 10	75	90	1 10	1 25	24.00	32 ¹ / ₂
23	70	80	95	1 10	75	90	1 10	1 25	23.45	33 ¹ / ₂
30	70	80	95	1 10	75	90	1 10	1 25	23.90	33 ¹ / ₂
February 6	70	80	95	1 10	75	90	1 10	1 25	24.25	33
13	70	80	95	1 10	75	90	1 10	1 25	24.75	34
20	70	80	95	1 10	75	90	1 10	1 25	24.50	34 ¹ / ₂
27	70	80	95	1 10	75	90	1 10	1 25	25.35	35 ¹ / ₂
March 6	70	80	95	1 10	75	90	1 10	1 25	25.95	36
13	70	80	95	1 10	75	90	1 10	1 20	25.50	36
20	70	80	95	1 10	75	90	1 05	1 20	25.95	36 ¹ / ₄
27	70	78	90	1 05	75	88	1 05	1 20	25.20	36 ¹ / ₂
April 3	70	78	90	1 05	75	88	1 05	1 20	24.65	36
10	70	78	90	1 05	75	88	1 05	1 20	24.40	35 ¹ / ₂
17	70	78	90	1 05	75	88	1 05	1 20	24.95	36
24	70	76	90	1 00	75	85	1 05	1 18	24.50	37
May 1	70	76	90	1 00	75	85	1 05	1 18	24.40	36
8	70	76	90	1 00	75	85	1 05	1 18	23.35	35 ¹ / ₂
15	70	76	90	1 00	75	85	1 05	1 18	22.30	33 ³ / ₄
22	70	76	90	95	75	85	1 05	1 18	23.50	34
29	70	75	90	95	75	85	1 05	1 18	23.75	34 ¹ / ₂
June 5	70	76	90	1 00	75	85	1 05	1 18	23.85	36
12	70	76	90	1 00	75	85	1 05	1 18	22.55	35 ¹ / ₂
19	70	76	90	1 00	75	85	1 05	1 18	23.40	33 ¹ / ₄
26	70	75	90	95	75	85	1 05	1 18	23.95	34
July 3	70	75	90	95	75	80	1 00	1 15	23.80	34 ¹ / ₄
10	70	75	90	95	75	80	1 00	1 15	24.20	34
17	70	75	90	95	75	80	1 00	1 15	24.40	33 ¹ / ₂
24	70	75	90	95	75	80	1 00	1 15	25.30	33 ¹ / ₂
31	70	75	90	95	75	80	1 00	1 15	24.85	33 ¹ / ₂
August 7	70	75	90	95	75	80	1 00	1 15	24.50	33
14	70	75	90	95	75	80	1 00	1 15	23.50	33 ¹ / ₂
21	68	75	88	95	73	80	1 00	1 15	23.65	30 ¹ / ₂
28	67	75	87	95	73	80	1 00	1 15	22.85	30
September 4	67	75	87	95	73	80	1 00	1 15	22.65	30
11	67	75	87	95	73	80	1 00	1 15	23.80	30 ¹ / ₂
18	67	75	87	95	75	80	1 00	1 15	24.65	32
25	70	76	87	95	75	80	1 00	1 15	23.90	31
October 2	70	76	87	95	75	80	1 00	1 15	23.15	30 ¹ / ₄
9	70	76	87	95	75	80	1 00	1 15	22.10	29
16	70	75	87	95	75	80	1 00	1 15	21.60	29
23	70	75	87	95	75	80	1 00	1 15	21.75	28 ¹ / ₂
30	68	73	86	95	73	78	97	1 15	19.75	27 ¹ / ₂
November 7	68	73	86	95	73	78	97	1 15	20.80	29
13	68	73	86	95	73	78	97	1 15	20.90	30 ¹ / ₂
20	68	73	86	95	73	78	97	1 10	21.00	30 ¹ / ₂
29	68	73	86	95	73	78	97	1 05	20.65	31 ¹ / ₂
December 4	68	73	86	95	73	78	97	1 05	20.75	31 ¹ / ₂
11	68	73	86	95	73	78	97	1 05	19.70	30
18	68	72	85	94	73	77	95	1 05	19.35	29 ¹ / ₂
26	65	70	83	92	72	75	95	1 05	20.65	28 ¹ / ₂

¹ New Bedford basis.

Prices of Gray Cloths and Spot Cotton, Week by Week, during 1925

[Prices are cents per yard]

Source: Daily News Record

DATE		64 x 60 37-Inch 7.60 Yards.	68 x 72 39-Inch 4.75 Yards.	48 x 48 37-Inch 4.00 Yards.	48 x 40 36-Inch 5.50 Yards.	64 x 104 39-Inch 4.20 Sateen.	Cotton Mid-up Spot, N. Y.
January	3	6.85	10.62	10.47	8.00	13.87	24.58
	10	6.75	10.50	10.39	8.00	13.75	24.05
	17	6.86	10.71	10.43	8.00	13.75	24.15
	24	6.88	10.88	10.37	8.00	13.75	23.81
February	31	6.79	10.77	10.27	7.87	13.75	23.83
	7	6.75	11.00	10.37	7.95	13.75	24.45
	14	6.77	11.12	10.37	8.00	13.75	24.58
	21	6.88	11.17	10.37	8.00	13.75	24.58
March	28	6.88	11.25	10.37	8.00	13.75	25.24
	7	6.96	11.29	10.41	8.04	13.75	26.03
	14	6.94	11.35	10.50	8.12	13.75	25.81
	21	6.90	11.30	10.50	8.03	13.75	25.67
April	28	6.75	11.16	10.31	7.85	13.62	25.34
	4	6.75	11.00	10.12	7.75	13.62	24.69
	11	6.71	11.02	10.04	7.66	13.54	24.50
	18	6.62	11.08	10.00	7.56	13.54	24.60
May	25	6.62	11.12	9.89	7.56	13.33	24.64
	2	6.58	11.10	9.77	7.42	13.32	24.20
	9	6.46	10.65	9.52	7.27	13.25	23.56
	16	6.27	10.31	9.31	7.16	12.87	22.49
June	23	6.25	10.08	9.10	7.10	12.75	23.52
	30	6.25	10.05	9.12	7.05	12.50	23.84
	6	6.19	10.00	9.06	7.00	12.37	24.05
	13	6.23	10.00	9.08	7.00	12.25	23.79
July	20	6.25	10.00	9.12	7.04	12.25	24.28
	27	6.33	9.06	9.12	7.12	12.25	24.25
	4	6.38	9.27	9.25	7.25	12.00	24.38
	11	6.41	9.31	9.25	7.19	12.25	24.25
August	18	6.48	9.37	9.33	7.25	12.25	24.67
	25	6.54	9.43	9.43	7.31	12.25	24.86
	1	6.62	9.52	9.72	7.50	12.33	25.22
	8	6.60	9.37	9.75	7.50	12.33	24.49
September	15	6.58	9.37	9.68	7.37	12.33	23.83
	22	6.53	9.35	9.62	7.39	12.33	23.61
	29	6.50	9.37	9.58	7.37	12.25	23.05
	5	6.50	9.31	9.50	7.37	12.25	22.52
October	12	6.58	9.47	9.77	7.25	12.30	23.77
	19	6.75	9.75	10.14	7.50	12.50	24.55
	26	6.79	9.76	10.25	7.91	12.75	23.96
	3	6.75	9.87	10.25	8.00	12.75	23.35
November	10	6.75	9.68	10.13	8.00	12.75	22.47
	17	6.69	9.62	10.00	7.93	12.70	21.70
	24	6.51	9.33	10.00	7.75	12.62	21.90
	31	6.40	9.00	9.87	7.62	12.37	20.24
December	7	6.32	8.87	9.75	7.37	12.25	20.63
	14	6.25	8.80	9.75	7.30	12.25	20.73
	21	6.25	8.97	9.75	7.31	12.25	21.00
	28	6.25	9.00	9.75	7.37	12.25	21.47
	4	6.25	9.00	9.75	7.37	12.25	20.85
	11	6.17	8.69	9.75	7.35	12.20	20.24
	18	6.06	8.50	9.56	7.25	12.20	19.48
	24	6.00	8.50	9.50	7.20	12.00	19.41
	31	6.00	8.55	9.50	7.12	12.00	20.68

Prices of Staple Cotton Yarns in the United States during the Year 1925

[Prices are cents per pound]

Source: Daily News Record

DATE		16s Single Southern Carded Frame Warps	16/2 Southern Carded Skeins	40/2 Southern Carded Warps	36s Northern Mule Spun Combed Peeler Cones
January	3 . .	43	43	56	67
	13 . .	42	42½	55½	67
	31 . .	41½	41 -41½	56	67
February	6 . .	40½	40½	56	67
	18 . .	40½	40½	56	67
	27 . .	41½	41½	57	67
March	6 . .	42½	42 -42½	57 -58	67
	18 . .	43½	43	59	67
	25 . .	42½	42	58	67
April	1 . .	42	41½	57 -58	67
	9 . .	41	41	56 -57	67
	25 . .	40½	40½	56	67
	29 . .	40½	40	56	67
May	2 . .	39½	39	54	67
	19 . .	38	38	55	64
	28 . .	38½	39	55	64
June	5 . .	38	38½	54½	64
	27 . .	37½	38 -38½	54½	64
July	2 . .	36½	37 -37½	53½	63
	8 . .	37	37½	54	63
	27 . .	39½-40	39 -40	55 -57	64
August	8 . .	39½	39	55	64
	28 . .	39	38½	54	64
	31 . .	38½	38	54	64
September	3 . .	39	38½	54	64
	17 . .	40½	40	57	64
	29 . .	41½	41	58	64
October	8 . .	41	40½	58	64
	31 . .	39	38½	56	64
November	5 . .	38	37½	55	64
	27 . .	38	38	56	64
December	1 . .	37½	37½	54	64
	18 . .	36	35½	53	64
	31 . .	35½	35	52½-53	64

Cotton Gray Goods Prices, December 31, 1925

[Inventory Basis]

Source: Daily News Record

	Construction	Width	Yards per Pound	Cents per Yard
Print cloth	64 x 60	27-inch	7.60	6
Print cloth	56 x 44	25-inch	10.55	4 $\frac{1}{4}$
Print cloth	64 x 60	38 $\frac{1}{2}$ -inch	5.35	8 $\frac{5}{8}$
Print cloth	80 x 80	39-inch	4.00	12
Tobacco cloth	20 x 12	36-inch	—	2 $\frac{1}{16}$
Tobacco cloth	44 x 44	36-inch	8.10	6 $\frac{1}{8}$
Sheeting	56 x 60	36-inch	4.00	9 $\frac{3}{4}$
Sheeting	48 x 40	36-inch	5.50	7 $\frac{1}{8}$
Sheeting	48 x 48	37-inch	4.00	9 $\frac{1}{2}$
Sheeting	48 x 48	40-inch	2.85	12
Sheeting	48 x 48	60-inch	3.30	15
Drill	—	30-inch	2.85	12 $\frac{3}{4}$
Drill	—	37-inch	3.95	9 $\frac{1}{2}$
Jean	84 x 56	30-inch	4.00	11 $\frac{1}{2}$
Three-leaf twill	64 x 48	39-inch	6.00	8 $\frac{3}{4}$
Three-leaf twill	68 x 76	39-inch	4.00	11 $\frac{3}{4}$
Albert (carded)	64 x 80	35-inch	5.10	10 $\frac{1}{4}$
Filling sateen	64 x 112	39-inch	4.00	13
Domestic broadcloth (carded)	100 x 64	37 $\frac{1}{2}$ -inch	4.00	13 $\frac{1}{4}$
Domestic broadcloth (combed)	112 x 60	37-inch	4.40	17
Lawn (carded)	72 x 60	30-inch	12.00	7
Lawn (carded)	88 x 80	40-inch	6.00	14
Lawn (combed)	80 x 80	40-inch	9.00	13
Lawn (combed)	84 x 80	40-inch	10.50	14 $\frac{1}{4}$
Voile slack twist)	60 x 52	40-inch	—	10
Voile (super hard twist)	60 x 56	34-inch	—	13 $\frac{1}{2}$
Poplin (carded)	100 x 44	37 $\frac{1}{2}$ -inch	3.90	13
Organdy	72 x 64	40-inch	13.00	11 $\frac{1}{2}$
Pongee	72 x 100	34-inch	7.00	14 $\frac{1}{4}$
Osnaburg (p. w.)	—	40-inch	7 oz.	12 $\frac{3}{8}$

17 $\frac{1}{4}$ -ounce square woven tire fabrics:

Cents per Pound

Carded Peeler	46
Cord tire fabrics:	
Carded Egyptian (uppers)	57
Carded peeler	46
Print cloth yarn dobby fancies	52

Prices of Staple Cotton Cloths in the United States 1914 to 1925, inclusive

[Prices are per linear yard]

Source: Daily News Record, and C. H. Pope & Co.

DATE	Print Cloth 38½", 64 x 60 5.35 Yards per Pound	Brown Sheeting 36", 56 x 60 4 Yards per Pound	Fine Lawn 40", 88 x 80 8.50 Yards per Pound
January 1, 1914	\$0 05 $\frac{3}{16}$	\$0 06 $\frac{1}{4}$ to 06 $\frac{3}{8}$	\$0 07
April 1, 1914	05 $\frac{1}{16}$	06 $\frac{1}{8}$ to 06 $\frac{1}{4}$	06 $\frac{1}{4}$
July 1, 1914	04 $\frac{1}{8}$	06	07 $\frac{1}{8}$
October 1, 1914	04	05 $\frac{1}{2}$	07 $\frac{1}{2}$
January 1, 1915	03 $\frac{1}{16}$	04 $\frac{1}{4}$ to 04 $\frac{1}{2}$	06 $\frac{5}{8}$
April 1, 1915	04	04 to 04 $\frac{1}{8}$	06 $\frac{3}{4}$
July 1, 1915	03 $\frac{3}{4}$	04 $\frac{7}{8}$	06 $\frac{3}{4}$
October 1, 1915	04 $\frac{1}{2}$	05 $\frac{5}{8}$ to 05 $\frac{3}{4}$	07
January 1, 1916	04 $\frac{3}{4}$	06	08
April 1, 1916	05 $\frac{5}{16}$	06 $\frac{1}{4}$ to 06 $\frac{3}{8}$	09 $\frac{1}{2}$
July 1, 1916	05 $\frac{5}{16}$	06 $\frac{5}{8}$ to 06 $\frac{3}{4}$	09 $\frac{3}{4}$
October 1, 1916	06	08	11
January 1, 1917	07 $\frac{3}{4}$	09 $\frac{3}{4}$	12
April 1, 1917	08 $\frac{1}{2}$	09 $\frac{1}{2}$ to 09 $\frac{3}{4}$	11 $\frac{1}{2}$
July 1, 1917	10 $\frac{1}{4}$	13	12 $\frac{3}{4}$
October 1, 1917	09 $\frac{1}{4}$	12 $\frac{1}{2}$ to 12 $\frac{3}{4}$	12
January 1, 1918	12	15 $\frac{1}{4}$	13
April 1, 1918	17 $\frac{1}{2}$	21	19 $\frac{1}{2}$
July 1, 1918	18 $\frac{3}{4}$	23	23 $\frac{1}{2}$
October 1, 1918	09 $\frac{3}{4}$	17 $\frac{1}{2}$	25 $\frac{1}{2}$
January 1, 1919	12 $\frac{1}{4}$	16	19 $\frac{1}{2}$
April 1, 1919	09 $\frac{3}{4}$	12	16
July 1, 1919	17	18 $\frac{1}{2}$	26 $\frac{1}{2}$
October 1, 1919	17	19 $\frac{1}{2}$ to 20	29
January 1, 1920	20 $\frac{1}{4}$	25	40
April 1, 1920	23	26 $\frac{1}{2}$ to 27	40
July 1, 1920	20	22 $\frac{1}{2}$	29
October 1, 1920	12 $\frac{1}{2}$	15 $\frac{1}{2}$	24 $\frac{1}{2}$
January 1, 1921	08	09 $\frac{3}{4}$	15 $\frac{1}{2}$
April 1, 1921	06 $\frac{5}{8}$	08	14 $\frac{3}{4}$
July 1, 1921	06 $\frac{3}{8}$	07 $\frac{1}{4}$	13 $\frac{1}{2}$
October 1, 1921	09 $\frac{1}{2}$	11 $\frac{1}{2}$	16 $\frac{1}{2}$
January 1, 1922	09	09 $\frac{3}{4}$	15 $\frac{3}{4}$
April 1, 1922	07 $\frac{3}{8}$	09	14 $\frac{1}{2}$
July 1, 1922	08 $\frac{1}{2}$	10 $\frac{1}{4}$	15 $\frac{1}{4}$
October 1, 1922	09	10 $\frac{5}{8}$ to 10 $\frac{3}{4}$	15
January 1, 1923	10 $\frac{3}{8}$	12 to 12 $\frac{1}{4}$	15 $\frac{1}{2}$
April 1, 1923	10 $\frac{1}{2}$	12 $\frac{3}{4}$	16
July 1, 1923	09 $\frac{1}{2}$	11 $\frac{1}{4}$	15 $\frac{1}{4}$
October 1, 1923	09 $\frac{1}{4}$	12 $\frac{1}{4}$	15 $\frac{1}{2}$
January 1, 1924	11	13 $\frac{1}{2}$	15 $\frac{3}{4}$
April 1, 1924	09 $\frac{1}{4}$	11	14 $\frac{3}{4}$
July 1, 1924	08 $\frac{3}{4}$	10 $\frac{3}{4}$	14 $\frac{1}{2}$
October 1, 1924	09	11	14 $\frac{1}{2}$
January 1, 1925	09 $\frac{1}{4}$	10 $\frac{7}{8}$	14 $\frac{1}{4}$
April 1, 1925	09	10 $\frac{3}{4}$	14 $\frac{1}{4}$
July 1, 1925	09 $\frac{1}{4}$	09 $\frac{3}{4}$	13 $\frac{3}{4}$
October 1, 1925	09 $\frac{1}{4}$	11 $\frac{1}{8}$	14
January 1, 1926	08 $\frac{1}{2}$	09 $\frac{3}{4}$	14

¹ Government-fixed price.

Average Yearly Print Cloth Prices

Source: Daily News Record

YEAR	25-Inch 36 x 44 10.55 Yard	27-Inch 64 x 60 7.60 Yard	38½-Inch 44 x 40 8.20 Yard	38½-Inch 60 x 48 6.25 Yard	38½-Inch 64 x 60 5.35 Yard	39-Inch 68 x 72 4.75 Yard	39-Inch 72 x 76 4.25 Yard	39-Inch 80 x 80 4.00 Yard	Average Cotton Goods Prices ¹	New York Middling Spot Cotton
Pre-war average (1911-12-13)	2.492	3.308	3.237	4.243	4.852	5.470	6.158	6.942	8.054	12.55
1914	2.299	3.071	3.146	3.774	4.465	5.111	5.769	6.403	7.851	11.81
1915	2.152	2.900	2.800	3.544	4.050	4.673	5.359	5.989	7.338	10.08
1916	3.059	4.118	4.178	5.200	6.031	6.781	7.370	8.011	9.860	14.45
1917	5.113	6.656	6.307	8.046	9.399	10.701	11.853	12.795	15.074	23.80
1918 ²	8.232	11.513	10.300	14.029	15.152	18.338	20.332	20.930	23.533	31.59
1919	8.010	9.869	9.300	12.650	13.700	16.695	19.258	21.670	21.912	32.37
1920	9.848	12.336	12.100	15.848	17.280	18.788	21.649	23.915	26.000	33.79
1921	3.953	5.079	4.855	6.565	7.710	8.869	9.635	11.387	13.018	15.05
1922	5.076	6.823	6.276	7.962	8.943	10.008	11.622	12.605	15.090	22.44
1923	5.426	7.461	7.052	8.835	10.198	11.721	12.646	13.608	17.145	29.30
1924	4.887	6.780	6.227	7.875	9.063	10.382	11.837	13.279	16.084	28.75
1925	4.786	6.535	6.183	7.981	9.222	10.541	11.802	12.700	15.097	23.43

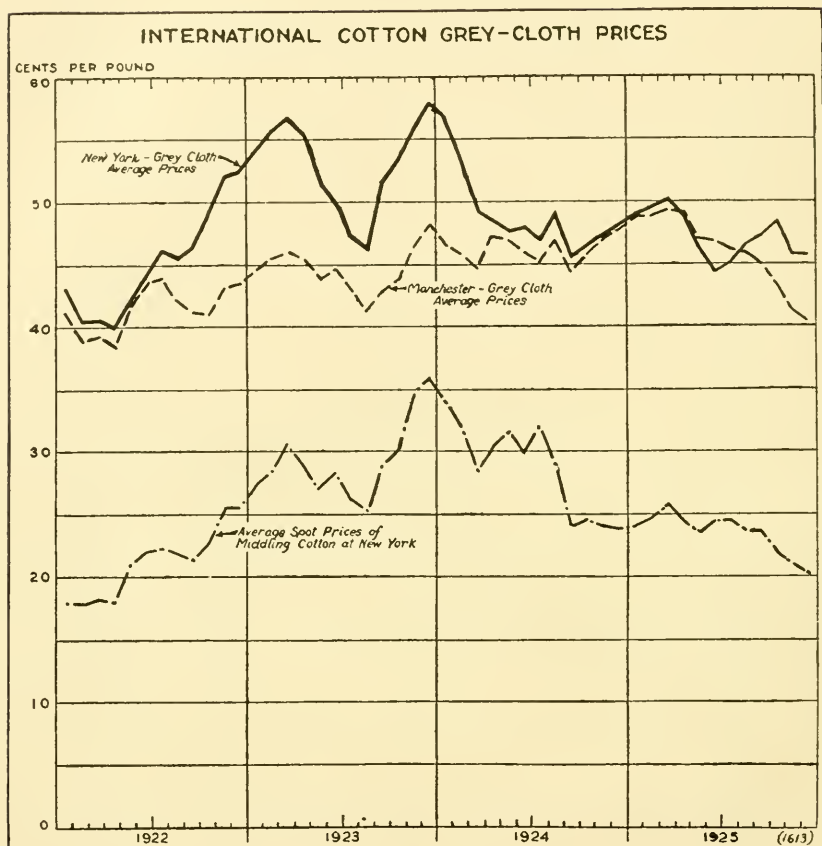
¹ This average includes, among others, eight print cloths, five sheetings, four drills, four standard colored goods, four bleached goods and two ducks.² In June, 1918, the government announced a list of maximum prices on cotton goods. These prices were really in effect till the end of the year. After the armistice in November, however, business almost ceased and there was practically no market. This may explain some figures which would otherwise seem irregular.

Average Yearly Standard Colored Goods and Bleached Goods Prices

Source: Daily News Record

Comms	Pre-war Average (1911-12-13)	1916	1917	1918 ¹	1919	1920	1921	1922	1923	1924	1925
Standard 2.20 denim	11.485	18.714	24.277	34.500	30.062	38.250	15.666	19.486	23.826	21.456	18.912
Standard fine chambray, about 5.00 yard	6.625	8.000	13.500	19.875	20.500	34.620	12.375	14.281	14.230	12.466	12.057
Standard 3.80 work shirt cham- bray	6.916	9.140	15.210	22.650	17.444	25.200	11.156	13.929	15.403	14.014	13.465
27-inch Eastern Standard staple gingham	6.194	7.244	11.000	17.694	18.178	19.305	12.329	13.820	14.395	12.207	11.146
Standard 8-ounce ticking . . .	13.138	16.454	27.071	39.034	33.400	28.030	19.250	23.156	26.740	25.866	23.658
Standard branded bleached mus- lin, Class A	8.432	10.050	14.800	24.000	25.045	33.500	16.684	17.278	18.497	18.337	17.996
Standard branded bleached mus- lin, Class B	7.235	8.960	12.475	20.570	21.300	21.300	13.330	13.812	15.014	14.805	14.206
10/4 bleached wide sheeting, Class A	25.857	31.585	40.862	64.205	67.819	71.042	50.730	52.091	57.484	56.397	52.277
10/4 bleached wide sheeting, Class B	22.308	27.447	35.674	58.290	60.594	64.200	46.215	47.104	51.346	50.295	46.708

¹ In June, 1918, the government announced a list of maximum prices on cotton goods. These prices were really in effect till the end of the year. After the armistice in November, however, business almost ceased, and there was practically no market. This may explain some figures which would otherwise seem irregular.



International Comparative Grey Cloth Prices

[Cents per pound at current exchange]

Source: United States Department of Commerce

WEEK ENDED		NEW YORK				MANCHESTER				OSAKA			
		1922	1923	1924	1925	1922	1923	1924	1925	1922	1923	1924	1925
January	3 . .	43.88	53.86	57.47	48.70	41.72	44.15	47.44	48.95	43.72	-	46.00	-
	10 . .	43.48	53.79	57.71	48.92	41.83	44.17	47.10	49.06	43.10	45.40	45.41	46.74
	17 . .	43.04	54.26	56.83	49.21	40.62	45.21	46.28	49.04	42.96	45.75	45.02	46.64
	24 . .	42.08	55.15	55.36	49.43	39.83	45.35	45.64	48.98	41.68	45.87	45.29	46.58
	31 . .	41.27	55.75	54.83	48.98	39.39	45.05	46.31	48.69	40.81	45.73	45.90	44.97
February	7 . .	40.17	55.59	54.32	48.98	38.91	45.66	46.70	48.87	39.29	-	46.77	44.88
	14 . .	39.73	55.66	53.66	49.52	38.32	45.69	46.24	48.74	39.57	44.81	46.34	45.40
	21 . .	40.19	55.81	51.62	49.59	39.31	45.98	44.30	48.69	39.86	45.12	45.13	44.95
	28 . .	40.67	56.20	50.75	50.06	39.94	45.96	44.86	48.60	38.63	45.62	44.76	45.24
March	7 . .	40.61	56.80	50.41	50.04	39.17	45.96	44.17	49.07	38.86	45.27	43.86	44.35
	14 . .	40.24	57.08	50.01	50.50	38.72	46.27	44.54	49.26	39.63	45.23	42.82	45.20
	21 . .	40.04	57.28	49.49	50.28	39.60	46.42	45.25	49.21	40.67	44.76	42.64	45.01
	28 . .	39.61	56.90	47.84	49.62	38.43	46.21	44.74	49.63	42.27	44.99	42.42	45.44
April	4 . .	39.83	56.25	47.06	48.87	38.66	46.01	45.65	48.83	42.39	44.67	42.52	44.25
	11 . .	39.48	55.64	49.58	49.07	37.06	45.69	46.97	48.59	41.25	44.86	42.81	42.30
	18 . .	40.16	55.46	49.35	48.78	39.63	45.21	48.27	48.54	40.31	44.48	41.78	43.56
	25 . .	40.01	54.60	48.13	48.24	39.19	45.07	48.18	48.31	40.24	44.55	41.43	41.98
May	2 . .	40.99	53.68	48.18	48.24	40.04	44.45	47.64	47.90	39.78	44.43	42.14	43.00
	9 . .	41.91	52.01	47.63	47.26	42.06	43.55	46.95	47.33	40.42	44.20	41.85	41.38
	16 . .	42.88	50.78	47.33	46.27	43.16	43.68	47.04	46.15	41.00	44.27	42.29	41.01
	23 . .	42.95	50.59	47.40	45.25	43.03	43.76	46.99	46.46	41.00	44.66	41.34	41.53
	30 . .	43.14	50.25	48.14	44.93	42.91	44.56	46.77	46.57	41.93	44.36	41.51	41.77
June	6 . .	43.14	49.78	48.33	44.54	43.38	44.34	46.50	46.76	42.36	44.47	41.45	42.31
	13 . .	44.42	49.94	48.26	44.50	44.29	45.55	45.85	46.39	42.80	44.22	41.63	42.81
	20 . .	44.93	49.66	47.82	44.21	44.71	44.54	45.89	46.63	43.30	44.04	41.51	43.59
	27 . .	45.36	49.45	47.94	44.39	43.77	44.61	45.51	46.37	44.12	43.68	41.37	43.38
July	4 . .	45.28	48.38	47.16	44.98	45.29	43.57	44.77	46.38	45.06	42.89	41.55	44.91
	11 . .	46.47	48.06	46.89	44.98	44.22	43.04	44.45	45.75	44.97	42.41	41.34	45.54
	18 . .	46.55	46.92	46.70	45.35	43.75	43.04	45.23	46.53	45.48	41.54	41.51	44.21
	25 . .	46.19	46.11	47.80	45.42	42.80	41.89	46.45	45.99	44.31	39.53	41.91	44.28
August	1 . .	46.03	45.85	50.29	46.85	42.13	40.27	48.07	46.47	43.91	39.61	42.78	44.34
	8 . .	45.41	45.81	49.99	46.63	42.06	41.54	47.72	46.19	43.86	39.08	43.81	44.81
	15 . .	44.70	46.16	49.61	46.63	41.37	41.60	47.84	45.91	42.69	37.70	44.20	44.66
	22 . .	45.70	47.48	48.72	47.02	43.59	41.75	46.19	45.83	42.88	37.89	43.83	44.69
	29 . .	45.90	47.62	47.59	46.44	41.85	41.55	45.30	45.52	41.87	39.57	44.05	44.10
September	5 . .	45.98	49.59	46.96	45.88	41.69	41.44	45.33	44.49	40.71	39.47	44.08	43.77
	12 . .	46.39	52.44	45.86	46.18	41.36	43.55	44.57	44.46	39.28	39.54	43.84	44.29
	19 . .	47.14	53.55	44.48	47.82	41.00	43.97	44.15	45.54	38.22	40.37	43.23	44.55
	26 . .	47.59	54.55	45.79	48.79	40.62	44.17	44.00	45.51	36.97	42.41	43.43	43.95
October	3 . .	47.51	54.02	47.23	49.16	40.32	44.01	45.70	44.81	37.72	42.31	43.96	43.97
	10 . .	48.48	52.56	47.65	49.08	40.63	43.22	46.31	44.30	-	42.84	43.04	43.56
	17 . .	49.29	53.27	45.76	48.81	41.16	43.76	45.94	42.92	38.66	42.94	43.12	43.19
	24 . .	50.71	53.28	45.63	47.92	42.08	44.16	45.55	42.92	38.96	43.66	43.72	42.72
	31 . .	51.48	53.71	45.83	47.05	42.44	44.84	46.26	41.92	38.89	44.32	43.99	41.78
November	7 . .	51.61	55.41	45.98	46.05	43.39	46.32	47.01	41.12	39.67	45.14	44.15	42.53
	14 . .	53.19	56.98	47.60	45.71	43.62	47.11	47.58	41.05	39.43	44.85	46.22	42.17
	21 . .	52.75	57.12	48.48	45.76	43.64	48.14	47.62	41.08	39.60	45.97	46.34	42.68
	28 . .	52.51	57.98	48.74	45.74	43.84	48.55	47.85	41.15	39.79	47.60	47.34	42.21
December	5 . .	52.28	58.67	48.17	45.87	43.46	49.11	47.55	40.85	40.06	47.22	46.70	41.66
	12 . .	51.68	57.97	47.88	45.36	44.10	47.10	48.11	40.68	40.48	45.99	46.79	40.61
	19 . .	52.70	57.91	47.88	44.82	43.86	48.27	47.96	39.89	41.67	46.72	46.61	39.91
	26 . .	53.46	57.91	48.62	43.98	43.03	48.32	48.34	39.89	-	-	-	40.83
January 2, 1926	. .	-	-	-	43.98	-	-	-	39.91	-	-	-	-
Annual average .		45.21	53.11	49.01	47.18	41.62	44.76	46.30	45.83	41.11	43.61	43.62	43.55

Cotton Finishing Industry ¹

Source: National Association of Finishers of Cotton Fabrics

	Billings (Thousands of Yards) ²	Orders, Grey Yardage (Thousands of Yards)	Shipments (Cases)	Stocks (Cases)	Activity (Per Cent of Capacity)
1921 monthly average	85,385	90,154	44,935	36,226	65
1922 monthly average	94,016	95,509	49,102	44,937	66
1923 monthly average	95,098	91,504	48,116	46,166	68
1924 monthly average	77,650	76,105	41,863	43,139	58
1925 monthly average	78,756	76,558	43,691	39,640	60
1924					
January	92,714	86,888	54,291	48,007	74
February	85,823	81,680	47,856	45,883	64
March	85,110	80,300	46,469	43,948	63
April	79,776	80,530	42,170	44,959	62
May	76,574	65,610	39,035	43,395	52
June	64,761	55,955	33,397	43,586	46
July	58,322	59,514	33,514	42,378	45
August	63,895	71,630	35,951	41,850	47
September	70,547	74,213	39,753	39,325	54
October	86,765	90,601	44,331	40,664	67
November	75,822	81,689	39,052	41,516	58
December	91,686	84,652	46,531	42,162	67
1925					
January	81,174	84,459	49,319	36,925	62
February	81,650	83,293	47,961	36,101	66
March	94,039	86,776	48,879	36,121	69
April	88,986	76,505	45,776	39,296	64
May	75,463	63,128	40,573	40,460	52
June	70,593	65,103	40,133	41,461	51
July	69,281	69,364	39,153	40,710	52
August	63,994	69,176	37,903	41,151	50
September	72,257	81,079	42,608	40,711	58
October	85,859	85,907	47,556	39,917	67
November	78,239	75,453	39,676	40,511	61
December	83,541	78,448	44,754	42,315	62

¹ Figures cover approximately 70 per cent of white goods, 55 per cent of dyed goods, and 25 per cent of printed goods finished outside of mills.

² Goods are billed as completed, hence billings approximate production.

Weekly Sales of Print Cloths at Fall River

[In thousands of pieces]

Source: J. M. Prendergast & Co.

		1918-19	1919-20	1920-21	1921-22	1922-23	1923-24	1924-25
August	1	100	80	—	—	—	—	130
	4	70	50	30	150	100	20	100
	11	170	40	40	150	70	80	60
	18	150	100	60	120	100	130	40
	25	80	40	20	200	200	350	30
September	1	60	50	30	250	300	160	25
	8	60	60	30	100	100	200	25
	15	30	140	130	70	300	190	30
	22	40	250	120	100	250	180	100
	29	50	180	30	200	250	130	100
October	6	50	180	20	100	200	60	60
	13	50	160	10	80	225	50	40
	20	75	200	10	60	250	100	60
	27	100	200	20	150	200	130	75
November	3	20	200	20	110	200	130	300
	10	20	120	10	80	180	300	70
	17	20	100	10	80	160	60	40
	24	30	100	10	70	100	100	40
December	1	30	160	20	100	90	180	30
	8	30	150	15	180	80	85	40
	15	40	160	20	180	150	50	30
	22	40	110	50	230	200	60	75
	29	60	110	50	180	175	50	40
January	5	40	180	100	150	175	50	70
	12	60	180	400	70	175	40	60
	19	50	160	250	75	300	50	70
	26	50	100	100	100	240	50	80
February	2	50	100	90	100	120	50	80
	9	50	60	120	120	120	80	80
	16	40	60	110	130	150	40	65
	23	40	50	60	230	225	50	75
March	1	60	40	60	150	250	80	70
	8	200	90	50	100	200	40	60
	15	200	100	60	70	150	70	40
	22	90	110	200	120	120	60	30
	29	80	150	70	100	80	50	30
April	5	370	120	60	90	70	120	25
	12	340	100	75	110	40	200	40
	19	230	120	90	300	40	50	30
	26	240	80	110	150	40	30	30
May	3	230	40	140	250	60	40	30
	10	320	40	180	225	40	40	30
	17	320	15	170	175	30	25	40
	24	211	50	80	150	30	25	30
	31	100	50	100	100	50	50	30
June	7	80	50	120	200	40	50	60
	14	150	40	70	200	100	70	75
	21	210	70	40	240	75	30	80
	28	120	30	60	150	70	25	100
July	5	130	30	80	120	50	25	100
	12	130	30	100	120	40	30	80
	19	100	40	120	200	25	60	75
	26	—	—	120	100	20	150	75

New Bedford Fine Cotton Goods Production and Sales¹

[Number of pieces]

Source: Fine Goods Exchange.

Production

	1919	1920	1921	1922	1923	1924	1925
January .	461,288	455,932	163,111	320,719	401,786	464,408	419,904
February .	304,458	361,088	241,211	339,348	399,024	409,377	388,053
March .	340,245	415,755	330,160	397,800	497,511	420,622	444,886
April .	331,328	394,422	432,244	366,323	423,201	355,591	449,266
May .	373,371	261,228	351,053	378,974	491,660	190,337	468,216
June .	302,522	384,444	393,526	404,202	458,605	284,726	404,157
July .	381,771	398,038	374,653	375,944	378,326	293,015	417,603
August .	426,212	355,788	359,703	410,858	430,072	318,513	402,103
September .	370,322	310,531	386,929	414,782	430,361	325,279	371,500
October .	418,917	261,339	394,864	372,996	444,079	385,301	452,552
November .	398,362	204,764	373,943	411,527	461,806	399,820	385,841
December .	493,481	187,525	449,913	435,785	448,701	399,228	448,625

Sales²

	1919	1920	1921	1922	1923	1924
January	103,448	414,411	565,511	229,380	556,440	250,360
February	64,888	123,342	179,919	202,208	383,818	191,278
March	369,172	192,299	287,897	319,917	440,066	201,281
April	1,060,880	235,573	339,970	273,626	215,503	225,327
May	776,982	41,522	323,132	347,368	180,914	127,819
June	470,555	55,130	331,815	518,068	265,859	215,566
July	563,514	53,448	306,589	93,964	211,147	464,194
August	210,368	63,148	521,458	322,396	444,491	267,784
September	499,945	61,410	537,402	574,439	438,968	377,770
October	640,361	46,321	314,858	666,787	327,694	251,728
November	239,493	24,156	191,440	393,453	390,943	457,359
December	360,522	89,550	440,578	391,480	271,549	329,319

¹ Reported by 24 identical mills in the New Bedford district; representing about 50 per cent of the fine cotton industry in New England and from 20 to 30 per cent throughout the United States.

² Sales not reported in 1925.

Activity of the American Cotton Industry

Source: United States Bureau of the Census

	Total Spindle Hours (Millions)	Hours per Spindle in Place	Hours per Spindle in Place relative to 1922	Per Cent of Capacity
1922 monthly average	7,723	209	100	93.7
1923 monthly average	8,288	222	106	98.8
1924 monthly average	6,696	177	85	78.6
1925 monthly average	7,877	208	100	92.7
1923				
January	9,266	249	119	107.5
February	8,449	227	109	109.6
March	9,531	255	122	108.3
April	8,787	236	113	109.3
May	9,309	249	119	107.7
June	8,385	224	107	98.7
July	7,136	191	91	87.3
August	7,569	202	97	85.7
September	7,482	200	96	93.2
October	8,382	223	107	95.4
November	8,015	213	102	96.6
December	7,139	190	91	86.8
1924				
January	8,448	224	107	96.7
February	7,304	194	93	89.8
March	7,073	187	89	82.4
April	6,770	179	86	79.9
May	5,908	156	75	67.5
June	5,336	141	67	64.6
July	5,158	136	65	60.6
August	5,400	143	68	62.8
September	6,415	170	81	76.1
October	7,593	201	91	85.4
November	7,124	188	90	87.5
December	7,817	206	99	90.4
1925				
January	8,493	224	107	96.4
February	7,868	208	100	100.0
March	8,599	227	109	99.6
April	8,518	225	108	100.0
May	7,930	210	100	93.6
June	7,690	203	97	89.0
July	7,298	192	92	84.6
August	6,954	184	88	80.5
September	7,102	188	89	83.8
October	7,962	210	100	89.4
November	7,834	207	99	96.0
December	8,272	218	104	99.5

Changes in Cost of Living in the United States, 1913 to 1925

Source: United States Bureau of Labor Statistics

ITEMS OF EXPENDITURE	PER CENT OF INCREASE FROM 1913 (AVERAGE) TO —											
	Dec., 1914	Dec., 1915	Dec., 1916	Dec., 1917	Dec., 1918	June, 1919	Dec., 1919	June, 1920	Dec., 1920	May, 1921	Sept., 1921	Dec., 1921
Food	5.0	5.0	26.0	57.0	87.0	84.0	97.0	119.0	78.0	44.7	53.1	49.9
Clothing	1.0	4.7	20.0	49.1	105.3	114.5	168.7	187.5	158.5	122.6	92.1	84.4
Housing	— ¹	1.5	2.3	.1	9.2	14.2	25.3	34.9	51.1	59.0	60.0	61.4
Fuel and light	1.0	1.0	8.4	24.1	47.9	45.6	56.8	71.9	94.9	81.6	80.7	81.1
House-furnishing goods	4.0	10.6	27.8	50.6	113.6	125.1	163.5	192.7	185.4	147.7	124.7	118.0
Miscellaneous	3.0	7.4	13.3	40.5	65.8	73.2	90.2	101.4	108.2	108.8	107.8	106.8
All items	3.0	5.1	18.3	42.4	74.4	77.3	99.3	116.5	100.4	80.4	77.3	74.3

¹ No change.

Changes in Cost of Living in the United States, 1913 to 1925 — (Concluded)

Source: United States Bureau of Labor Statistics

ITEMS OF EXPENDITURE	PER CENT OF INCREASE FROM 1913 (AVERAGE) TO —											
	June, 1922	Sept., 1922	Dec., 1922	Mar., 1923	June, 1923	Sept., 1923	Dec., 1923	Mar., 1924	June, 1924	Sept., 1924	Dec., 1924	June, 1925
Food	41.0	39.8	46.6	41.9	44.3	49.3	50.3	43.7	42.4	46.8	51.5	55.0
Clothing	72.3	71.3	71.5	74.4	74.9	76.5	76.3	75.8	74.2	72.3	71.3	70.6
Housing	60.9	61.1	61.9	62.4	63.4	64.4	66.5	67.0	68.0	68.0	68.2	67.4
Fuel and light	74.2	83.6	86.4	86.2	80.6	81.3	84.0	82.2	77.3	79.1	80.5	76.7
House-furnishing goods	102.9	102.9	108.2	117.6	122.2	122.4	122.4	121.3	116.0	114.9	116.0	114.3
Miscellaneous	101.5	101.1	100.5	100.3	100.3	101.1	101.7	101.1	101.1	101.1	101.7	102.7
All items	66.6	66.3	69.5	68.8	69.7	72.1	73.2	70.4	69.1	70.6	72.5	73.5

Wage Rates paid by Cotton Mills of Lancashire, England, since 1853

The table below gives the wage rates paid under the standard lists of Lancashire, in terms of percentage of the basic list prices. Basic list prices are indicated by 100; rates 5 per cent above list are expressed by 105; rates 5 per cent below list are expressed by 95, etc.

END OF YEAR —	COTTON SPINNING		Cotton Weaving Blackburn ¹ and Uniform Lists
	Bolton List	Oldham List	
1853	No list	No list	Blackburn list adopted +10
1854-57	No list	No list	100
1858	List adopted	No list	100
1859	100	No list	100
1860	105	No list	105
1861-65	100	No list	100
1866	105	No list	100
1867	100	No list	List revised
1868	100	No list	100
1869	95	No list	95
1870	95	No list	100
1871	100	No list	100
1872-73	105	No list	100
1874	100	No list	100
1875	105	No list	100
1876	105	List adopted	100
1877	100	95	100
1878	100	85	90
1879	90	80	85
1880	95	85	85
1881-82	95	90	90
1883	95	90	85
1884	95	90	90
1885-87	90	85	90
1888-89	95	90	90
1890	100	90	90
1891	100	95	90
1892	100	95	Uniform list adopted -10
1893-98	100	92.09	90
1899	100	95	92.5
1900-04	105	100	92.5
1905	105	100	97.5
1906	105	105	100
1907-08	110	110	100
1909-11	105	105	100
1912-14	105	105	105
1915	110	110	105
1916	115	115	110
1917	140	140	140
1918	215	215	215
1919	245	245	245
1920	315 ²	315 ²	315 ³
1921	245	245	245
1922-25	195	195	195

¹ Blackburn list succeeded by Uniform list in 1892.

² Strippers and grinders, blowing-room operatives, and leading men in cotton rooms received in 1920 an additional 10 per cent on wages realized after the addition of the 70 per cent of the list.

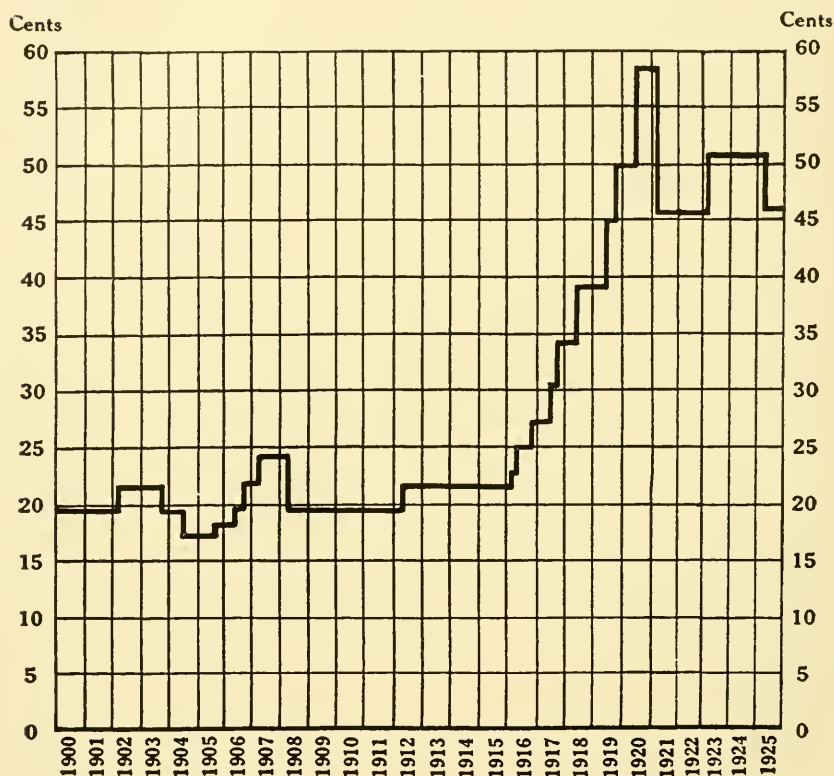
³ Tapers, dry tapers, warp dressers, and loom overlookers received an advance in 1920 of only 55 per cent of list, instead of the 70 per cent which other operatives received. In 1921 these operatives were reduced only 55 per cent instead of the 70 per cent by which other workers were cut down.

General Wage Changes in New Bedford since 1870

PERIOD	Advance or Reduction from Previous Rate (Per Cent)	Percentage of January, 1870, Rate	Percentage of Pre-war Rate
January, 1870, to March, 1870	—	100.00	—
March, 1870, to December, 1873	+10	110.00	—
December, 1873, to December, 1875	—10	99.00	—
December, 1875, to August, 1878	—10	89.10	—
August, 1878, to January, 1880	—10	80.19	—
January, 1880, to April, 1880	+10	88.20	—
April, 1880, to April, 1884	+10	97.02	—
April, 1884, to April, 1885	—10	87.31	—
April, 1885, to April, 1886	—10	78.57	—
April, 1886, to April, 1888	+10	86.42	—
April, 1888, to August, 1892	+5	90.74	—
August, 1892, to December, 1892	+3	93.46	—
December, 1892, to September, 1893	+7	100.00	—
September, 1893, to August, 1894	—10@15	87.50	—
August, 1894, to April, 1895	—5	83.12	—
April, 1895, to January, 1898	+5	87.27	—
January, 1898, to April, 1899	—10	78.54	—
April, 1899, to December, 1899	+10	86.39	—
December, 1899, to April, 1902	+10	95.02	—
April, 1902, to December, 1903	+10	104.52	—
December, 1903, to July, 1906	—10 ¹	95.02	—
July, 1906, to December, 1906	+5	99.77	—
December, 1906, to May, 1907	+7½	107.25	—
May, 1907, to April, 1908	+10	117.97	—
April, 1908, to March, 1912	—10	106.17	—
March, 1912, to January, 1916	+10	116.78	100.00
January, 1916, to April, 1916	+5	122.61	105.00
April, 1916, to November, 1916	+10	134.87	115.50
November, 1916, to June, 1917	+10	148.35	127.05
June, 1917, to November, 1917	+10	163.18	139.76
November, 1917, to June, 1918	+10	179.49	153.74
June, 1918, to June, 1919	+17½	210.90	180.64
June, 1919, to December, 1919	+15	242.53	207.74
December, 1919, to June, 1920	+12½	272.84	233.71
June, 1920, to January, 1921	+15	313.76	268.77
January, 1921, to April, 1923	—22½	243.16	208.30
April, 1923, to January, 1925	+12½	273.56	234.34
January, 1925, to —	—10	246.21	210.91

¹ Approximate reduction of 10 per cent to scale of December, 1899.

Wage Rates paid for weaving Print Cloths in Fall River



The above chart, based on the table at the top of the following page, shows the fluctuations in the amount paid by Fall River print cloth manufacturers to their weavers for weaving $47\frac{1}{2}$ yards of 28", 64 x 64, 7-yard print cloths. Wage rates of other classes of operatives, per hour or per piece, fluctuated in about the same ratio as those of weavers during the period covered. Accordingly this chart may be taken as indicating the general changes in the hourly or piece wage rates of Fall River mill-workers.

Wage Rates paid for weaving Print Cloths in Fall River

Prices paid for weaving 47½ yards of 28-inch, 64 x 64, 7-yard print cloth

PERIOD	Wage Rate	Advance or Reductions from Previous Rate (Per Cent)	Percentage of 1900 Rate	Percentage of Pre-war Rate
December, 1899, to March, 1902 .	\$0.1980	+10	100	—
March, 1902, to November, 1903 .	2178	+10	110	—
November, 1903, to July, 1904 .	1980	-9 ¹ / ₁₀	100	—
July, 1904, to October, 1905 .	1732	-12 ¹ / ₂	87 ¹ / ₂	—
October, 1905, to July, 1906 .	1861	+7 ¹ / ₂	94	—
July, 1906, to November, 1906 .	1980	+6 ⁴ / ₁₀	100	—
November, 1906, to May, 1907 .	2178	+10	110	—
May, 1907, to May, 1908 .	2396	+10	121	—
May, 1908, to March, 1912 .	1966	-17 ⁹ / ₁₀	99	—
March, 1912, to January, 1916 .	2163	+10	109	100.00
January, 1916, to May, 1916 .	2271	+5	115	105.00
May, 1916, to December, 1916 .	2498	+10	126	115.50
December, 1916, to June, 1917 .	2748	+10	139	127.05
June, 1917, to December, 1917 .	3023	+10	154	139.76
December, 1917, to June, 1918 .	3401	+12 ¹ / ₂	172	157.23
June, 1918, to June, 1919 .	3911	+15	198	180.81
June, 1919, to December, 1919 .	4498	+15	227	207.93
December, 1919, to June, 1920 .	5060	+12 ¹ / ₂	256	233.92
June, 1920, to January, 1921 .	5819	+15	293	269.01
January, 1921, to April, 1923 .	4510	-22 ¹ / ₂	228	208.48
April, 1923, to January, 1925 .	5074	+12 ¹ / ₂	257	234.54
January, 1925, to —	4567	-10	231	211.09

Average Cash Dividends of New Bedford and Fall River Mills

Source: Sanford & Kelly of New Bedford and G. M. Haffards & Co. of Fall River

YEAR	New Bedford	Fall River
1910	9.59 per cent on \$31,865,100 capital	6.80 per cent on \$26,856,700 capital
1911	5.50 per cent on \$36,821,300 capital	4.96 per cent on \$27,561,700 capital
1912	4.40 per cent on \$37,126,300 capital	4.25 per cent on \$27,561,700 capital
1913	5.63 per cent on \$38,925,000 capital	6.87 per cent on \$30,179,100 capital
1914	4.76 per cent on \$39,225,000 capital	4.03 per cent on \$30,349,700 capital
1915	7.83 per cent on \$39,725,000 capital	3.77 per cent on \$30,349,700 capital
1916	7.33 per cent on \$40,675,000 capital	8.01 per cent on \$30,486,700 capital
1917	16.47 per cent on \$49,012,300 capital	13.08 per cent on \$33,111,700 capital
1918	12.66 per cent on \$50,656,300 capital	18.02 per cent on \$34,111,700 capital
1919	13.30 per cent on \$50,572,500 capital	14.46 per cent on \$34,111,700 capital
1920	26.17 per cent on \$50,966,500 capital	32.77 per cent on \$33,860,000 capital
1921	9.19 per cent on \$59,374,000 capital	8.01 per cent on \$38,610,000 capital
1922	9.72 per cent on \$61,735,200 capital	9.60 per cent on \$37,210,000 capital
1923	6.96 per cent on \$72,251,900 capital	7.81 per cent on \$44,666,700 capital
1924	5.13 per cent on \$73,251,900 capital	6.45 per cent on \$43,665,000 capital
1925	5.30 per cent on \$74,028,900 capital	5.03 per cent on \$43,585,000 capital

Gross Manufacturing Margins on Staple Yarns and Cloths in the United States

[Cents per pound]

Source: Merchants National Bank of Boston

		Average Margin on Four Yarns	Average Margin on Three Print Cloths	Average Margin on Three Sheetings	Average Margin on Two Ducks and Two Drills
August	4, 1923	9.85	18.90	13.15	14.80
September	1, 1923	11.18	19.32	12.45	13.42
October	6, 1923	10.36	18.88	12.51	13.56
November	3, 1923	10.04	17.54	10.74	10.99
December	1, 1923	9.82	16.61	8.20	9.98
January	5, 1924	8.56	16.68	9.07	11.37
February	2, 1924	5.74	14.09	7.95	10.29
March	1, 1924	7.16	14.80	9.99	11.35
April	5, 1924	4.81	13.11	7.50	8.29
May	3, 1924	6.50	12.54	6.65	8.12
June	7, 1924	5.98	14.56	7.03	7.43
July	5, 1924	3.43	12.18	5.31	7.01
August	2, 1924	9.24	17.52	10.86	9.97
September	6, 1924	10.34	18.58	12.69	14.60
October	4, 1924	10.01	18.27	12.02	13.18
November	1, 1924	12.07	18.34	13.60	14.92
December	6, 1924	12.08	20.92	14.09	16.10
January	3, 1925	10.45	20.96	13.03	14.41
February	7, 1925	8.93	20.60	12.66	14.11
March	7, 1925	7.82	19.49	10.83	12.12
April	4, 1925	8.93	19.34	11.65	13.61
May	2, 1925	6.44	18.58	10.51	13.38
June	6, 1925	5.84	16.25	8.09	12.00
July	4, 1925	5.72	16.26	7.49	10.07
August	1, 1925	6.12	17.04	7.64	11.17
September	5, 1925	8.27	20.60	11.45	13.95
October	3, 1925	10.55	22.20	13.62	13.99
November	7, 1925	10.54	21.69	14.45	15.66
December	4, 1925	10.54	21.48	13.87	14.82
January	1, 1926	9.24	19.67	12.46	14.48

These weekly average margins show the spread between the price of cotton after making an allowance for waste and the price of yarns and cloths.

United States Exports of Cotton Machinery, 1925

Source: United States Department of Commerce

COUNTRY OF DESTINATION	Looms	Carding Machinery	Spinning and Twisting Machinery	Knitting Machinery	Other Cotton Machinery
Belgium	\$987	—	—	\$33,964	\$6,924
France	816	\$51,095	\$52,391	139,664	56,073
Germany	111,147	1,700	165,615	83,924	96,172
Italy	378,491	433	88,687	369,841	107,076
Netherlands	51,970	—	—	989	—
Poland and Danzig	—	—	—	6,800	133
Spain	7,675	40	9,934	54,402	219
United Kingdom	26,454	—	50	1,869,316	38,578
Canada	245,267	13,553	69,595	446,082	347,976
Mexico	7,509	254	2,939	189,793	75,498
Argentina	127	—	—	454,088	3,385
Brazil	81,925	730	—	466,502	11,557
Chile	13,199	—	—	51,683	704
Colombia	2,664	51	474	13,128	16,482
British India	486	—	—	17,613	31,938
China	9,256	12,707	24,650	50,330	89,066
Hongkong	—	—	—	3,387	—
Japan	26,218	6,278	18,437	61,050	48,341
Australia	21,941	—	131	190,362	2,062
Total	\$990,877	\$88,360	\$441,086	\$4,706,769	\$1,007,926

Estimated Cost, as of January 1, 1911, and January 1, 1926, of erecting and equipping Complete a Spinning Mill of 50,000 Spindles to be built in New England and based on Machinery Manufacturers' List Prices making No. 16 Carded Yarns for Hosiery Trade finished on Cones and Skeins

Source: Lockwood, Greene & Co., Inc.

SPINNING MILL	1911	1926
Mill buildings (including warehouse)	\$252,800 00	\$493,446 00
Fire protection	15,400 00	28,845 00
Lighting	8,400 00	16,511 00
Heating and humidifying	17,600 00	27,550 00
Shafting	7,100 00	8,550 00
Motor and power wiring	56,000 00	88,578 00
Belting	8,800 00	15,000 00
Supplies and miscellaneous equipment	40,100 00	72,000 00
Power plant complete	198,300 00	360,360 00
Textile machinery and erection	496,400 00	772,135 00
Freights	15,800 00	17,460 00
Engineering and contingencies	111,800 00	190,044 00
	\$1,228,500 00	\$2,090,479 00

Above buildings of slow-burning construction, three stories for spinning, one story for picking, and four stories for storehouse for a six months' supply.

Sprinkler and hydrants for fire protection, electric lights, steam coils for heating, individual heads for humidifiers.

Power houses with steam turbines.

Drives are individual motors on pickers, two and four frame for roving and spinning, and group drive for balance of machinery.

Estimated Cost as of January 1, 1911, and January 1, 1926, of erecting and equipping a Weaving Shed to be built in New England and based on Machinery Manufacturers' List Prices containing 1,280 Automatic Looms to weave Print Cloths 38½ Inches Wide, 5.35 Yard 64 x 60 Threads per Inch and of Carded No. 28.5 Warp and No. 39 Filling

Source: Lockwood, Greene & Co., Inc.

WEAVE SHED	1911	1926
Manufacturing buildings, including plumbing	\$180,500 00	\$376,473 00
Fire protection, including tank, hose houses, hydrants and sprinklers	10,400 00	18,146 00
Lighting, including transformers and wiring	4,100 00	8,051 00
Heating and humidifying	18,500 00	29,165 00
Shafting	11,400 00	13,775 00
Motors and power wiring	16,700 00	25,337 00
Belting	5,600 00	9,900 00
Supplies	5,000 00	9,000 00
Power plant complete	110,000 00	192,933 00
Textile machinery	243,700 00	311,736 00
Freight	5,000 00	8,730 00
Engineering contingencies	61,100 00	100,225 00
	\$672,000 00	\$1,102,471 00

Buildings of slow-burning construction. Shed one story with basement and saw-tooth roof. Sprinkler and hydrants for fire protection, electric lights, steam coils for heating, individual heads for humidity. Power house with steam turbine. Group drive with shafting in basement.

Figured that yarns would be received on beams and cones or tubes.

Goods woven on automatic looms.

Same equipment figured for both 1911 and 1926, but with prices changed according to years.

Estimated Costs per Spindle of Four Different Mills Each of 50,000 Spindles Complete as of January 1 for Years 1910 to 1926 to be built in New England and based on Machinery Manufacturers' List Prices.

Source: Lockwood, Greene & Co., Inc.

YEAR	SPINNING MILLS		SPINNING AND WEAVING MILLS	
	No. 1 Hosiery Yarns Carded No. 16	No. 2 Hosiery Yarns Combed No. 17 5	No. 3 Print Cloths 38.5 wide— 5.35 Yard 64 x 60 Carded No. 28.5 Warp Carded No. 39 Filling	No. 4 Lawns 38.5"— 6.40 Yard 104 x 112 Combed No. 60 Warp Combed No. 90 Filling
1910	\$25 02	\$32 15	\$28 28	\$24 46
1911	24 48	31 46	27 67	23 93
1912	24 55	31 55	27 75	24 00
1913	24 36	31 30	27 53	23 81
1914	23 21	29 82	26 23	22 68
1915	24 14	31 02	27 28	23 59
1916	26 78	34 42	30 27	26 18
1917	33 29	42 78	37 63	32 54
1918	40 07	51 50	45 29	39 17
1919	49 08	63 08	55 48	47 98
1920	64 63	83 05	73 05	63 17
1921	61 37	78 87	69 36	59 99
1922	47 61	61 19	53 82	46 54
1923	45 97	59 08	51 96	44 94
1924	46 76	60 09	52 85	45 71
1925	44 79	57 35	50 44	43 62
1926	41 81	53 73	47 26	40 91

No. 1. Three-story mill, one-story picker house, four-story storehouse. Yarn made of double roving and finished on cones and in skeins.

No. 2. Four-story mill, two-story picker house, four-story storehouse. Yarn made of double roving and finished on cones and in skeins.

No. 3. Spinning mill four stories, weave shed one story and basement and sawtooth roof. Yarns made of double roving and woven on automatic looms.

No. 4. Spinning mill three stories, weave shed one story and basement and sawtooth roof. Yarn made of double roving and woven on plain looms.

All buildings of slow-burning construction. Storehouses figured on a six months' supply. All power plants have complete steam turbine unit. The mill heated by steam coils and humidified by individual heads.

The drives are figured as individual motors on pickers, two and four frame for roving and spinning and group drives for balance of machinery.

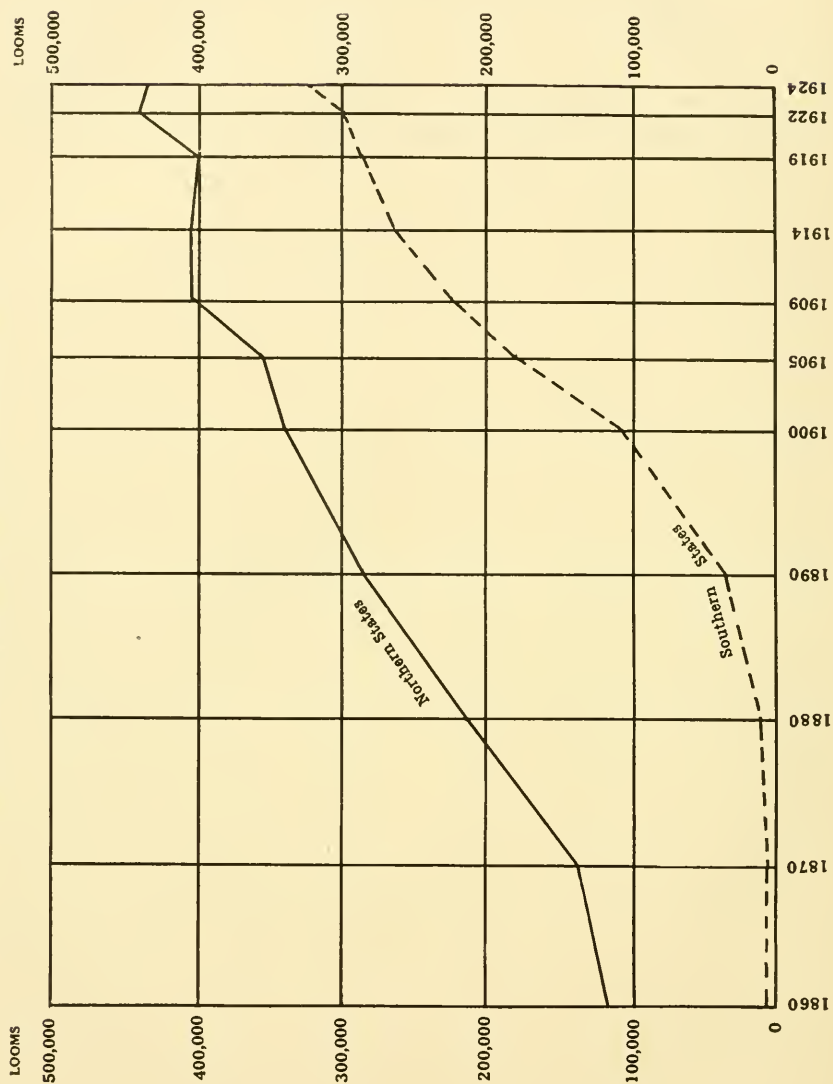
**Cost of Principal Machines in Cotton Manufacturing Equipment
made up from the Machinery Manufacturers' List Prices as
of January 1 of Each Year from 1910 to 1926**

Source: Lockwood, Greene & Co., Inc.

DATE	Finisher Picker	Card	Comber	Drawing Frame per Delivery	Roving Frame per Delivery	Spinning Frame per Spindle	Plain Loon	Mill Con- struc- tion per Square Foot
1910	\$750 00	\$600 00	\$1,250 00	\$60 00	\$6 50	\$2 60	\$83 00	\$0 96
1911	700 00	550 00	1,250 00	60 00	5 60	2 50	83 00	94
1912	750 00	600 00	1,250 00	55 00	5 75	2 50	83 00	94
1913	700 00	550 00	1,200 00	55 00	5 50	2 50	83 00	94
1914	675 00	500 00	1,150 00	55 00	5 00	2 00	83 00	93
1915	700 00	525 00	1,300 00	60 00	5 50	2 20	83 00	94
1916	750 00	650 00	1,300 00	60 00	6 75	2 65	85 00	1 06
1917	1,000 00	850 00	1,400 00	75 00	8 50	3 90	101 00	1 36
1918	1,280 00	975 00	1,800 00	90 00	10 00	4 50	152 00	1 66
1919	1,600 00	1,200 00	2,000 00	115 00	13 00	5 50	164 50	2 00
1920	1,760 00	1,325 00	2,400 00	125 00	14 50	6 00	213 50	2 92
1921	1,920 00	1,600 00	2,500 00	160 00	18 00	7 00	213 50	2 50
1922	1,600 00	1,325 00	2,250 00	125 00	14 50	6 00	147 00	1 85
1923	1,440 00	1,100 00	2,250 00	100 00	11 50	5 00	135 00	2 10
1924	1,600 00	1,200 00	2,250 00	115 00	13 00	5 50	152 00	1 90
1925	1,440 00	1,100 00	2,250 00	100 00	11 50	5 00	152 00	1 90
1926	1,280 00	960 00	2,250 00	90 00	10 00	4 25	152 00	1 85

NOTE. — The above prices for mill construction are for a three-story building with unfinished basement of slow-burning construction, exclusive of service equipment. Unit costs of construction are based on a total floor area of 200,000 square feet.

Looms in Northern and Southern States



Cotton Looms in the United States

Source: United States Bureau of the Census

YEAR	Northern States	Southern States	Western States
1860	118,529	6,789	995
1870	149,956	6,256	1,098
1880	212,019	11,898	1,842
1890	285,190	36,266	3,410
1900	340,078	110,015	5,653
1905	355,806	179,752	5,352
1909	404,365	223,403	5,195
1914	405,274	263,683	3,797
1919	401,069	286,933	4,167
1922 ¹	440,096	297,614	6,124
1924 ¹	433,222	325,608	6,292

¹ Figures from Dockham's Textile Directory. These statistics are not strictly comparable with the Census figures, as Dockham includes all cotton manufactures, while the Census includes only cotton goods.

Active Cotton Spindles in the United States, by States

Source: United States Bureau of the Census

	1920	1921	1922	1923	1924	1925
New England States:						
Maine	1,124,822	1,114,020	1,121,527	1,137,651	1,133,732	1,130,728
New Hampshire	1,436,748	1,428,415	1,376,483	1,384,757	1,238,078	1,245,968
Vermont	144,808	144,808	144,808	144,808	144,808	144,808
Massachusetts	11,560,720	11,582,691	11,235,406	11,222,741	10,589,228	9,766,276
Rhode Island	2,658,415	2,766,426	2,746,721	2,837,903	2,732,520	2,524,842
Connecticut	1,361,911	1,351,429	1,313,860	1,325,856	1,227,670	1,162,820
Total New England States	18,287,424	18,387,789	17,938,805	18,053,716	17,066,036	15,975,442
Other Non-Cotton-growing States:						
New York	992,678	990,252	963,583	1,000,234	951,640	870,180
New Jersey	411,165	421,699	424,591	440,560	437,854	480,112
Pennsylvania	242,215	221,311	185,550	164,507	169,216	145,788
Maryland	142,792	142,792	112,936	112,024	104,500	92,252
Indiana	81,756	80,256	79,256	80,756	81,480	81,980
Illinois	57,094	51,640	57,432	58,720	58,782	57,896
Other	34,846	42,640	39,420	39,124	35,652	36,554
Total Other Non-Cotton-growing States	1,962,546	1,950,590	1,862,768	1,895,925	1,839,124	1,764,762
Cotton-growing States:						
Virginia	573,610	585,650	628,538	654,785	688,870	694,354
North Carolina	4,953,889	5,152,121	5,251,467	5,463,547	5,763,334	5,909,666
South Carolina	4,966,460	5,006,258	5,081,609	5,107,038	5,215,828	5,295,170
Georgia	2,536,531	2,640,800	2,598,070	2,682,730	2,757,480	2,807,756
Alabama	1,212,516	1,281,444	1,281,861	1,294,512	1,356,638	1,421,884
Mississippi	162,876	159,372	172,612	178,508	177,508	142,212
Tennessee	397,329	413,589	424,560	437,168	459,160	468,564
Kentucky	95,078	95,288	93,184	92,684	91,284	92,762
Louisiana	103,128	103,128	97,128	94,748	94,748	89,564
Texas	143,054	166,468	168,192	175,104	193,100	225,862
Other	86,512	104,870	108,944	129,536	146,228	144,248
Total Cotton-growing States	15,230,983	15,708,988	15,906,165	16,310,360	16,944,178	17,292,042
Total United States	35,480,953	36,047,367	35,707,738	36,260,001	35,849,338	35,032,246

Cotton Spindles in Place and Spindle Hours, by Months

Source: United States Bureau of the Census

MONTH AND STATE	COTTON SPINDLES IN PLACE			ACTIVE SPINDLE HOURS		
	1924-25	1923-24	1922-23	1921-25	1923-24	1922-23
MONTHS						
United States:						
August	37,868,968	37,410,388	37,041,472	5,434,436,281	7,543,166,431	8,029,031,944
September	37,901,344	37,456,968	37,062,527	6,471,791,548	7,506,127,463	7,780,694,800
October	37,906,230	37,524,136	37,091,164	7,655,209,854	8,407,143,031	8,279,416,547
November	37,899,058	37,576,008	37,152,233	7,143,314,102	8,021,988,231	8,728,478,519
December	37,939,772	37,620,324	37,185,351	7,841,016,264	7,152,234,451	8,235,857,302
January	37,925,698	37,723,368	37,219,867	8,553,990,895	8,346,739,363	9,274,139,548
February	37,890,576	37,725,332	37,281,827	7,892,607,663	7,099,773,416	8,449,558,695
March	37,805,122	37,743,958	37,317,396	8,614,547,421	7,071,494,954	9,535,670,166
April	37,808,900	37,763,106	37,280,903	8,520,044,774	6,775,823,019	8,780,378,777
May	37,842,464	37,785,414	37,316,792	7,931,831,847	5,908,438,000	9,302,814,957
June	37,843,208	37,812,164	37,358,248	7,686,275,664	5,344,271,040	8,391,259,603
July	37,928,792	37,804,048	37,408,689	7,309,549,004	5,182,493,618	7,143,800,590
Cotton-growing States:						
August	17,238,176	16,471,026	16,078,796	3,355,675,020	4,456,159,678	4,398,229,720
September	17,292,194	16,533,760	16,100,945	4,087,220,552	4,409,612,009	4,357,887,912
October	17,296,496	16,619,138	16,106,644	4,858,259,078	4,838,758,068	4,568,100,117
November	17,299,084	16,687,216	16,153,311	4,561,827,959	4,653,584,790	4,691,405,379
December	17,358,138	16,734,332	16,171,957	4,623,100,481	4,071,199,038	4,240,503,889
January	17,396,394	16,803,700	16,223,993	5,260,626,243	5,024,068,904	5,002,912,284
February	17,421,466	16,846,542	16,274,772	4,786,824,859	4,223,105,203	4,573,349,374
March	17,429,278	16,922,768	16,311,880	5,187,082,773	4,315,537,290	5,121,187,097
April	17,461,172	17,019,124	16,326,422	5,129,572,735	4,136,631,416	4,803,242,369
May	17,495,584	17,072,058	16,350,363	4,832,480,926	3,743,338,688	5,116,920,306
June	17,520,574	17,129,120	16,385,263	4,725,126,122	3,400,515,954	4,709,189,700
July	17,634,948	17,226,118	16,458,116	4,504,269,940	3,326,046,554	4,193,263,973
New England:						
August	18,563,624	18,923,550	18,938,386	1,871,881,644	2,775,639,087	3,222,966,017
September	18,566,804	18,905,324	18,938,130	2,108,483,594	2,780,235,963	3,033,918,957
October	18,576,944	18,885,836	18,961,068	2,450,286,519	3,181,381,276	3,303,394,333
November	18,573,908	18,867,680	18,972,380	2,284,041,965	2,991,441,193	3,612,225,813
December	18,560,372	18,866,506	18,982,756	2,866,553,619	2,771,004,516	3,589,956,941
January	18,535,054	18,895,866	18,991,088	2,923,600,675	2,968,643,386	3,828,799,367
February	18,498,704	18,865,068	19,001,661	2,787,257,919	2,563,104,411	3,452,513,136
March	18,406,942	18,807,480	19,001,245	3,069,881,237	2,434,308,596	3,937,092,605
April	18,381,336	18,736,200	18,951,228	2,997,308,450	2,347,449,462	3,560,056,221
May	18,384,182	18,701,512	18,948,520	2,746,459,513	1,914,198,496	3,751,214,688
June	18,363,264	18,669,828	18,954,964	2,617,707,672	1,716,575,298	3,302,423,211
July	18,332,654	18,575,712	18,930,146	2,477,752,061	1,658,285,184	2,676,716,606

Spindles in Place and Spindle Hours, by States

Source: United States Bureau of the Census

STATES	COTTON SPINDLES IN PLACE			ACTIVE SPINDLE HOURS		
	1924-25	1923-24	1922-23	1924-25	1923-24	1922-23
Total	37,928,792	37,804,048	37,408,689	91,054,615,317	84,359,693,047	101,931,101,448
Cotton-growing	17,634,948	17,226,118	16,458,116	55,912,066,688	50,598,557,682	55,776,192,120
New England	18,332,654	18,575,712	18,930,146	31,201,214,868	30,102,266,868	41,271,277,895
All other	1,961,190	2,002,218	2,020,427	3,941,333,761	3,658,868,497	4,883,631,433
Alabama	1,432,378	1,392,778	1,330,162	4,310,503,544	3,967,554,144	4,245,104,857
Connecticut	1,238,814	1,254,868	1,366,668	2,530,223,753	2,656,603,557	3,393,233,317
Georgia	2,855,166	2,798,242	2,693,535	8,953,643,722	7,898,098,472	9,318,238,709
Maine	1,118,236	1,137,704	1,140,928	2,176,234,432	2,164,007,723	2,829,545,069
Massachusetts	11,597,424	11,792,160	11,951,334	18,666,085,567	17,762,675,018	25,233,380,970
New Hampshire	1,445,734	1,448,406	1,449,700	2,308,269,862	1,890,176,304	2,451,775,339
New Jersey	513,032	442,424	447,152	1,080,315,700	898,994,671	969,132,896
New York	995,878	1,032,450	1,037,418	1,907,877,530	1,842,155,603	2,826,919,829
North Carolina	5,982,076	5,861,366	5,509,183	19,606,791,926	17,332,650,667	19,062,834,757
Pennsylvania	157,780	195,300	203,305	314,272,931	317,883,166	373,541,443
Rhode Island	2,787,638	2,797,766	2,876,708	5,254,543,995	5,377,943,296	6,985,333,666
South Carolina	5,321,264	5,266,378	5,132,364	18,007,339,810	16,605,845,707	17,905,451,588
Tennessee	544,424	458,192	438,696	1,365,884,854	1,322,132,639	1,353,979,885
Texas	239,596	207,248	176,444	649,519,775	527,141,951	557,258,693
Virginia	711,314	707,314	673,306	1,674,266,691	1,570,753,232	1,739,555,652
All other States	988,038	1,011,452	981,786	2,248,841,225	2,225,076,897	2,685,814,778

Spindles in Place in Leading Counties, 1925

Source: United States Bureau of the Census

COUNTY	Spindles (Number)	COUNTY	Spindles (Number)	COUNTY	Spindles (Number)
Bristol, Mass.	7,516,756	Madison, Ala.	269,696	Durham, N. C.	179,760
Providence, R. I.	1,840,000	Hudson, N. J.	268,904	Rowan, N. C.	172,948
Gaston, N. C.	1,116,760	York, S. C.	264,532	Talladega, Ala.	168,082
Middlesex, Mass.	1,108,512	Richmond, N. C.	260,330	Calhoun, Ala.	167,732
Spartanburg, S. C.	940,516	Richland, S. C.	251,348	Tallapoosa, Ala.	164,664
Hillsboro, N. H.	897,868	Greenwood, S. C.	243,492	Kennebec, Me.	157,768
Greenville, S. C.	769,252	Albany, N. Y.	229,124	Chester, S. C.	152,120
Hampden, Mass.	732,816	Pickens, S. C.	227,128	Lancaster, S. C.	151,768
Worcester, Mass.	720,380	Cherokee, S. C.	226,788	Halifax, N. C.	147,080
Windham, Conn.	698,960	Bristol, R. I.	226,164	Cumberland, Me.	145,392
Essex, Mass.	645,932	Laurens, S. C.	215,200	Floyd, Ga.	133,744
Anderson, S. C.	598,376	Hampshire, Mass.	211,080	Catawba, N. C.	132,856
Kent, R. I.	589,602	Fulton, Ga.	206,748	Davidson, N. C.	129,796
Berkshire, Mass.	548,820	Rutherford, N. C.	204,236	Spaulding, Ga.	125,168
New London, Conn.	489,628	Rockingham, N. C.	200,452	Iredell, N. C.	120,908
Pittsylvania, Va.	467,440	Aiken, S. C.	198,656	Merrimack, N. H.	112,876
Oncida, N. Y.	451,188	Richmond, Ga.	189,832	Robeson, N. C.	110,936
Muscogee, Ga.	448,372	Cleveland, N. C.	187,908	McDowell, N. C.	108,416
Androscoggin, Me.	425,720	Alamance, N. C.	186,744	Lincoln, N. C.	108,032
Cabarrus, N. C.	406,180	Chambers, Ala.	184,360	Caldwell, N. C.	106,552
York, Me.	389,356	Troup, Ga.	182,884	Newton, Ga.	104,512
Union, S. C.	339,852	Knox, Tenn.	182,196	Vance, N. C.	104,184
Strafford, N. H.	320,376	Newberry, S. C.	181,816	Hall, Ga.	103,156
Mecklenburg, N. C.	309,814	Stanley, N. C.	180,248	Orleans, La.	100,748
Guilford, N. C.	308,418				

Active Ring and Mule Spindles

Source: United States Bureau of the Census

STATE	NUMBER OF ACTIVE COTTON SPINDLES							
	1925		1919		1909		1899	
	Ring	Mule	Ring	Mule	Ring	Mule	Ring	Mule
United States	32,959,642	2,072,604	31,561,268	3,369,666	23,256,023	4,922,839	13,444,872	5,563,480
Alabama	1,421,884	—	1,170,658	3,640	909,587	3,916	403,328	8,000
Connecticut	853,558	309,262	932,813	402,578	832,830	446,586	607,448	393,126
Georgia	2,776,756	31,120	2,451,101	48,230	1,703,071	71,896	730,619	84,926
Illinois	57,896	—	45,838	11,705	23,240	16,000	15,488	16,000
Indiana	81,980	—	81,256	—	115,152	8,952	86,168	16,320
Kentucky	80,368	12,394	76,968	16,520	68,124	16,920	48,234	18,399
Louisiana	89,564	—	102,944	—	63,096	4,806	55,600	—
Maine	1,105,448	25,280	1,064,892	42,160	867,364	161,316	584,573	256,948
Maryland	92,252	—	140,940	—	133,302	—	154,064	—
Massachusetts	8,738,766	1,027,510	9,743,150	1,633,153	7,480,902	2,156,699	5,228,371	2,556,316
Mississippi	142,012	—	143,874	—	159,104	800	75,122	—
Missouri	31,336	312	31,336	600	30,304	440	13,654	—
New Hampshire	1,228,828	17,140	1,410,947	23,008	1,169,850	156,050	956,390	287,165
New Jersey	312,804	167,308	204,355	276,012	107,381	313,403	64,638	367,092
New York	831,578	41,602	862,981	113,608	547,512	415,329	353,132	367,136
North Carolina	5,897,058	12,608	4,736,288	33,840	2,886,453	71,782	1,098,080	35,352
Pennsylvania	123,984	21,804	155,228	96,605	139,062	139,245	182,190	124,447
Rhode Island	2,147,508	377,334	2,037,036	634,896	1,496,434	875,343	940,294	940,328
South Carolina	5,290,850	4,320	4,907,745	2,460	3,732,063	28,828	1,420,597	10,752
Tennessee	458,564	10,000	355,138	13,401	237,530	10,000	103,116	20,780
Texas	225,862	—	140,054	—	97,628	—	48,756	—
Vermont	134,608	10,200	131,024	10,200	75,872	15,840	56,712	43,316
Virginia	689,944	4,410	552,440	7,050	316,970	7,572	124,502	2,325
All other States	146,234	—	82,262	—	63,192	1,116	93,796	14,752

United States Cotton Spinning Spindles in Place, by States

Source: United States Bureau of the Census

YEAR	Massachusetts	Rhode Island	New Hampshire	Maine	Connecticut	Vermont	New York	New Jersey	Pennsylvania	Maryland
1880	4,236,084	1,764,569	944,053	695,924	936,376	55,081	561,658	232,221	425,391	125,706
1890	5,872,852	1,959,294	1,198,643	892,762	939,155	71,591	629,324	374,442	496,551	161,786
1900	7,932,883	1,976,198	1,249,875	848,377	1,064,016	100,028	764,492	431,730	336,509	154,064
1905	8,388,533	2,055,912	1,332,075	904,490	1,034,915	100,382	878,276	438,372	339,924	154,968
1906	8,790,793	2,130,958	1,296,445	912,593	1,174,527	102,264	806,254	417,679	288,143	134,112
1907	9,167,698	2,231,461	1,357,877	1,007,717	1,268,065	130,752	1,011,368	440,354	400,395	151,384
1908	9,446,380	2,388,105	1,320,503	978,188	1,240,296	107,324	928,316	447,029	268,310	151,000
1909	9,688,637	2,399,440	1,313,581	1,005,258	1,253,582	105,184	942,521	460,888	275,654	152,266
1910	9,703,573	2,412,272	1,440,173	1,037,176	1,282,232	105,184	970,445	463,403	297,799	153,010
1911	10,613,290	2,526,995	1,462,788	1,066,552	1,270,071	105,276	963,969	483,057	280,202	160,114
1912	11,066,846	2,552,743	1,453,778	1,052,674	1,307,907	136,892	925,576	485,176	265,715	158,168
1913	11,075,684	2,533,380	1,469,137	1,096,986	1,308,650	136,304	956,595	476,731	249,857	162,288
1914	11,046,990	2,574,942	1,466,580	1,117,228	1,340,482	136,304	967,578	477,779	252,685	166,240
1915	10,914,087	2,567,644	1,468,390	1,104,209	1,335,282	136,304	963,748	481,255	259,965	157,380
1916	11,104,810	2,611,553	1,465,013	1,108,790	1,362,186	135,894	913,979	482,831	256,913	151,904
1917	11,280,351	2,653,397	1,459,853	1,099,278	1,372,860	135,894	938,158	491,843	256,314	147,764
1918	11,512,247	2,683,451	1,462,462	1,096,255	1,376,554	135,894	983,893	487,755	262,896	153,531
1919	11,630,397	2,678,180	1,444,074	1,111,940	1,387,517	141,224	980,321	489,647	266,003	145,208
1920	11,758,613	2,675,892	1,443,776	1,127,138	1,392,547	144,808	997,542	417,837	259,715	145,460
1921	11,810,563	2,805,538	1,457,428	1,126,452	1,388,949	144,808	1,017,163	424,145	268,878	142,792
1922	11,922,573	2,829,202	1,448,660	1,146,440	1,364,656	144,808	1,019,528	433,983	236,263	130,924
1923	11,951,334	2,876,708	1,449,700	1,140,928	1,366,668	144,808	1,037,418	447,152	203,305	131,104
1924	11,792,160	2,797,766	1,448,403	1,137,704	1,254,868	144,808	1,024,290	442,424	195,300	131,296
1925	11,605,232	2,787,638	1,445,734	1,118,236	1,238,814	144,808	995,878	513,032	157,780	-

United States Cotton Spinning Spindles in Place, by States — (Concluded)

Source: United States Bureau of the Census

YEAR	Alabama	Georgia	Louisiana	Mississippi	North Carolina	South Carolina	Tennessee	Texas	Virginia
1880	49,432	198,656	—	18,568	93,385	82,334	35,736	—	44,340
1890	79,234	445,452	46,200	57,004	337,786	332,784	97,524	15,000	94,294
1900	411,328	815,545	55,600	75,122	1,133,432	1,431,349	123,896	48,756	126,827
1905	758,087	1,316,573	59,052	125,352	1,880,950	2,804,092	153,375	68,170	193,062
1906	870,154	1,573,450	95,200	165,188	2,396,703	3,307,204	258,794	101,759	253,206
1907	904,244	1,682,506	88,724	173,064	2,681,386	3,609,969	253,148	109,892	272,710
1908	939,942	1,792,790	89,552	173,216	2,944,404	3,713,006	265,198	106,924	295,579
1909	984,534	1,831,742	89,152	176,640	3,010,367	3,819,149	272,856	106,528	315,676
1910	968,239	1,833,244	87,070	185,280	3,062,061	3,833,901	272,774	108,778	329,174
1911	967,564	1,980,813	86,588	183,662	3,353,706	4,187,317	253,460	113,100	372,816
1912	985,968	2,025,238	86,088	191,092	3,403,996	4,327,178	254,278	114,352	414,148
1913	1,000,080	2,103,018	86,095	192,306	3,593,999	4,536,353	271,634	123,908	426,920
1914	1,058,685	2,160,571	86,095	190,216	3,813,940	4,632,204	296,620	124,628	477,886
1915	1,075,859	2,178,573	79,763	184,636	3,915,842	4,710,826	320,052	124,848	513,434
1916	1,126,846	2,275,929	79,563	166,984	4,053,206	4,743,193	319,148	128,762	516,166
1917	1,136,786	2,422,810	93,408	167,604	4,375,283	4,851,161	330,352	128,112	528,394
1918	1,169,624	2,482,131	96,832	166,932	4,591,026	4,903,840	367,503	132,236	524,194
1919	1,292,294	2,518,059	102,944	155,756	4,789,322	4,955,765	373,695	140,054	580,310
1920	1,215,268	2,542,155	103,128	174,714	4,954,935	4,974,460	399,963	145,054	575,610
1921	1,283,096	2,648,325	103,128	176,778	5,228,266	5,013,538	415,593	166,468	488,982
1922	1,300,699	2,679,379	101,128	172,612	5,292,880	5,090,088	427,832	168,192	633,870
1923	1,330,162	2,693,535	100,748	178,508	5,509,133	5,132,364	438,696	176,444	673,306
1924	1,390,278	2,798,242	100,748	182,508	5,858,762	5,263,258	456,992	207,248	707,314
1925	1,431,868	2,885,166	100,748	185,192	5,982,770	5,321,264	544,424	239,596	711,314

Cotton Mills in Southern States

Source: New Orleans Cotton Exchange

STATES	1919	1920	1921	1922	1923	1924	1925
Virginia	14	14	14	14	14	14	14
North Carolina	391	414	420	425	437	444	445
South Carolina	196	201	201	202	206	201	205
Georgia	160	160	161	161	164	167	166
Alabama	74	79	81	83	84	84	85
Mississippi	17	17	18	18	18	18	18
Tennessee	25	25	25	25	28	28	29
Kentucky	7	7	6	6	5	6	6
Missouri	2	2	2	2	2	2	2
Arkansas	2	2	2	2	2	2	3
Louisiana	5	5	5	5	5	5	5
Texas	16	18	21	22	22	25	30
Oklahoma	1	1	1	1	2	2	2
Total	910	945	957	966	989	998	1,010

Looms in Southern Cotton Mills

Source: New Orleans Cotton Exchange

STATES	1919	1920	1921	1922	1923	1924	1925
Virginia	15,828	16,368	17,895	18,487	19,327	19,320	19,328
North Carolina	69,611	71,114	73,233	74,554	81,366	84,615	85,976
South Carolina	115,491	115,432	115,415	116,949	119,248	123,724	126,476
Georgia	46,696	46,939	47,331	47,966	50,019	50,933	51,846
Alabama	21,288	21,282	21,957	23,320	23,792	25,568	26,114
Mississippi	4,118	4,312	4,152	4,190	4,818	4,839	4,776
Tennessee	5,357	5,383	5,990	6,004	6,328	6,274	8,159
Kentucky	1,353	1,353	1,295	1,385	1,376	1,378	1,376
Missouri	730	730	730	730	730	730	580
Arkansas	233	161	133	150	150	—	—
Louisiana	2,100	2,018	2,018	2,018	2,229	2,329	2,329
Texas	3,766	3,928	4,035	4,419	5,745	5,976	6,124
Oklahoma	64	64	64	64	564	564	468
Total	286,635	289,084	294,248	300,236	315,692	326,250	333,552

World's Cotton Spindles ¹

As compiled by leading authorities

YEARS	United States Bureau of the Census	Shepperson's Cotton Facts	Comtelburo's Cotton Handbook	International Federation of Master Cotton Spinners
1900	105,681,000	—	103,115,000	—
1901	—	107,395,000	102,715,145	—
1902	—	—	111,802,010	—
1903	—	—	112,854,077	—
1904	—	—	114,394,712	—
1905	116,764,438	—	118,254,146	—
1906	120,090,595	—	123,229,202	—
1907	123,332,971	124,320,000	126,594,000	114,096,168
1908	130,054,408	—	129,346,714	128,923,659
1909	133,377,000	—	136,903,457	131,503,062
1910	134,526,000	—	139,608,000	133,384,794
1911	137,792,000	—	141,625,000	137,278,752
1912	140,996,000	—	143,142,000	140,693,103
1913	143,398,000	143,730,000	147,191,000	143,452,659
1914	146,397,000	144,980,000	148,891,000	144,704,012
1915	—	148,226,000	150,737,000	—
1916	—	149,785,000	151,667,000	—
1917	148,500,000	151,200,000	154,310,000	—
1918	150,000,000	149,400,000	—	—
1919	150,000,000	153,505,000	153,799,000	—
1920	154,600,000	151,313,000	156,163,000	154,201,462
1921	153,010,000	147,922,000	157,081,000	152,317,054
1922	157,020,000	157,061,000	158,795,000	154,555,267
1923	157,000,000	156,811,000	162,357,000	156,353,000
1924	159,109,000	157,536,464	163,948,835	158,047,000
1925	161,832,000	158,746,784	166,090,536	161,363,000

¹ For those years for which no statistics are given the authorities here quoted either did not compile estimates or their estimates are not available.

The World's Cotton Mills, 1925

Source: Comtelburo's Cotton Handbook

COUNTRY		Mills	Spindles	Looms	Consumption, (Bales)	Hands employed
Great Britain	1925	1,917	59,902,954	788,197	3,321,210	630,000
United States, North	1924	738	20,496,752	436,586	2,166,448	236,000
United States, South	1925	968	17,336,116	326,222	4,380,118	186,000
Canada	1924	50	1,566,022	34,745	212,781	25,750
Germany	1923	372	10,060,000	240,700	1,708,279	375,000
Russia	1924	180	7,245,935	202,011	775,000	216,902
Poland	1925	63	1,394,000	35,000	214,000	56,000
Finland	1925	6	252,600	6,030	30,000	7,100
Esthonia	1925	2	546,208	5,787	14,522	3,960
Latvia	1923	4	88,436	633	—	—
France	1925	572	9,555,000	181,900	1,053,000	197,540
Hungary	1925	25	93,000	8,250	20,000	7,600
Austria	1925	90	1,094,346	14,091	131,668	19,000
C. Slovakia	1925	87	3,508,000	125,000	329,000	116,000
Jugo-Slavia	1921	6	200,000	4,000	79,366	5,644
Switzerland	1925	64	1,525,856	27,339	80,000	26,500
Italy	1925	500	4,700,000	130,000	700,000	260,000
Spain	1925	300	1,850,000	70,000	360,000	125,000
Portugal	1925	45	500,000	20,000	65,000	30,000
Belgium	1925	70	2,120,000	29,350	225,000	19,250
Holland	1925	103	838,000	49,000	76,000	33,000
Sweden	1925	36	565,000	16,500	75,000	13,000
Norway	1925	15	67,900	2,718	10,000	2,800
Denmark	1925	40	79,000	8,000	20,428	4,450
Turkey	1925	1	5,000	—	3,325	—
Cyprus	1925	1	1,800	—	550	70
Greece	1923	76	163,000	1,670	30,000	9,145
Egypt	1925	1	40,000	800	8,000	1,000
Asia Minor	1925	7	55,000	3,325	36,750	3,030
India	1924	336	8,313,273	151,485	1,917,748	356,887
China	1924	119	3,581,214	22,477	1,624,000	195,691
Japan	1924	241	5,110,000	64,460	2,344,000	153,321
Indo-China	1925	5	90,000	500	45,000	3,000
Brazil	1925	244	2,163,440	65,651	447,389	110,119
Argentina	1924	7	30,000	1,500	10,000	2,000
Chile	1916	3	5,000	400	—	454
Peru	1925	9	76,796	3,049	15,992	3,100
Columbia	1924	16	30,500	1,940	3,000	—
Ecuador	1923	11	15,000	200	12,000	10,000
Venezuela	1924	4	26,000	1,000	26,000	5,000
Guatemala	1925	1	5,000	150	5,984	500
Mexico	1924	174	794,388	36,939	182,000	44,490
Total (estimated)		7,516	166,090,536	3,117,605	22,758,558	3,494,303

Japanese Cotton Industry

Source: Japan Cotton Spinners' Association

YEARS	Number of Companies	Number of Mills	CAPITAL		Reserve Funds (Yen) ¹	NUMBER OF SPINDLES			Twisting Spindles	Looms
			Authorized (Yen) ¹	Paid-up (Yen) ¹		Ring	Mule	Total		
1905	49	—	40,082,350	33,563,700	9,531,622	1,343,534	83,060	1,426,594	134,840	8,140
1906	47	—	45,403,350	38,433,350	15,386,948	1,395,013	77,240	1,472,253	136,866	9,601
1907	42	118	90,036,300	57,531,125	20,966,234	1,492,032	48,420	1,540,452	154,789	9,462
1908	36	125	85,511,300	58,397,385	22,189,614	1,743,921	51,958	1,795,879	177,860	11,146
1909	31	134	75,871,300	64,501,000	22,784,470	1,903,854	51,038	1,954,892	227,574	13,813
1910	36	136	94,271,300	67,516,013	24,658,967	2,044,284	55,480	2,099,764	282,186	17,702
1911	34	139	89,160,150	64,347,164	24,788,872	2,117,756	53,040	2,170,796	286,410	20,431
1912	41	147	105,136,400	72,366,495	28,538,314	2,125,000	51,748	2,176,748	317,324	21,898
1913	44	152	113,036,401	86,444,059	33,803,119	2,365,094	49,405	2,414,499	320,912	24,224
1914	42	157	109,676,400	85,820,424	36,639,349	2,606,004	51,170	2,657,174	348,766	25,443
1915	41	161	110,176,400	86,011,677	38,663,064	2,754,124	53,390	2,807,514	355,318	30,068
1916	40	161	137,290,150	99,641,818	48,952,381	2,825,944	49,960	2,875,904	370,681	31,295
1917	43	170	162,830,150	115,623,020	70,037,275	3,008,568	51,910	3,060,478	383,458	36,181
1918	43	177	192,877,650	138,494,595	92,426,047	3,175,768	51,910	3,227,678	384,872	40,391
1919	54	190	221,927,650	165,758,695	139,073,869	3,435,932	52,330	3,488,262	410,690	44,401
1920	56	198	394,327,650	276,535,896	165,697,053	3,761,250	52,330	3,813,680	466,460	50,583
1921	61	217	429,577,650	295,648,358	182,040,774	4,116,616	44,510	4,161,126	538,384	54,994
1922	64	235	462,107,650	317,148,075	202,774,376	4,472,112	45,500	4,517,612	602,032	60,765
1923	60	228	463,977,650	323,787,485	211,298,943	4,183,596	14,370	4,197,966	501,031	61,421
1924	56	232	512,362,500	349,820,568	212,871,930	4,845,082	25,150	4,870,232	676,995	64,225

¹ Yen = \$0.4985 U. S.

Japanese Yarn Production

Source: Japan Cotton Spinners' Association

YEARS	Average Working Spindles	PRODUCTION OF COTTON YARN						DAILY OPERATIVES (AVERAGE)			WAGES (AVERAGE DAILY)	
		Coarse Yarn (Bales) ¹	Medium Yarn (Bales) ¹	Fine Yarn (Bales) ¹	Doubling (Bales) ¹	Gassed (Bales) ¹	Total (Bales) ¹	Males	Females	Total	Males (Rin) ²	Females (Rin) ²
1905	1,329,404	792,439.0	50,104.0	157.0	42,584.0	20,252.5	905,536.5	12,812	58,634	71,446	346	213
1906	1,404,714	826,363.0	55,125.0	148.0	43,376.5	20,155.0	945,167.5	14,496	61,278	75,774	365	228
1907	1,458,020	859,214.5	53,762.0	-	47,377.5	23,127.5	983,481.5	15,242	64,377	79,619	393	246
1908	1,367,631	738,659.0	54,171.0	-	59,555.5	26,185.0	878,570.5	15,049	56,154	74,203	410	250
1909	1,569,080	841,778.0	78,975.0	7.0	71,651.0	32,823.5	1,025,244.5	16,844	66,664	83,508	425	267
1910	1,741,168	964,675.0	63,637.5	1,814.5	74,436.5	30,217.0	1,134,780.5	18,266	75,614	93,880	434	272
1911	1,784,064	934,713.0	82,739.5	4,627.5	74,536.0	32,651.0	1,129,267.0	17,628	74,868	92,496	450	288
1912	1,984,191	1,090,172.5	119,893.5	6,722.5	95,683.5	39,737.5	1,352,209.5	18,421	80,779	99,200	467	305
1913	2,167,926	1,212,001.5	142,409.0	8,666.5	109,996.0	44,909.0	1,517,982.0	19,707	88,038	107,745	485	320
1914	2,363,801	1,350,850.5	149,498.0	7,760.5	119,790.0	38,282.0	1,666,181.0	22,163	92,251	114,414	491	319
1915	2,463,376	1,360,259.0	187,761.0	8,096.5	130,536.5	33,611.5	1,720,264.5	22,674	92,500	115,174	495	322
1916	2,737,299	1,458,617.0	259,840.0	10,153.5	155,483.5	41,485.0	1,925,579.0	23,845	97,279	121,124	500	334
1917	2,850,637	1,421,978.0	287,259.5	7,730.5	164,850.0	42,023.0	1,923,841.5	25,518	97,648	123,166	545	371
1918	2,936,495	1,245,723.5	366,868.5	7,427.5	138,286.5	45,560.0	1,803,866.0	26,790	95,069	121,859	686	476
1919	3,179,568	1,285,926.0	422,967.5	9,202.0	156,542.5	46,144.5	1,920,782.5	30,935	101,399	131,839	1,116	870
1920	3,191,753	1,222,525.5	401,868.5	7,477.5	146,562.5	38,542.0	1,816,976.0	33,966	109,782	143,748	1,567	1,196
1921	3,162,353	1,276,600.5	346,148.5	6,199.5	141,136.0	41,265.5	1,811,350.0	34,904	105,704	140,608	1,463	1,134
1922	3,967,265	1,557,052.0	429,484.5	7,167.5	185,761.5	48,780.5	2,228,246.0	41,009	132,442	173,451	1,544	1,243
1923	4,079,855	1,484,705.5	449,274.5	10,175.0	177,472.5	49,325.5	2,171,153.0	38,159	121,811	159,970	1,483	1,180
1924	4,115,692	1,320,986.5	449,037.5	13,479.0	184,539.0	54,751.0	2,072,817.5	36,015	117,307	153,322	1,524	1,206

¹ Bales of 400 pounds each.² Rin = 1/1000 yen = \$0.00049.

Japanese Cotton Piece-goods Production

Source: Japan Cotton Spinners' Association

YEARS	Average Working Looms	Production of Cotton Piece-goods (Yards)	Yarn Consumed (Pounds)	DAILY OPERATIVES (AVERAGE)		WAGES (AVERAGE DAILY)	
				Male	Female	Male (Rin). ¹	Female (Rin). ¹
1905	6,420	114,908,132	36,545,146	989	6,847	384	255
1906	8,491	137,773,415	40,702,848	1,248	7,937	393	259
1907	9,245	135,253,029	44,202,958	1,525	8,727	430	277
1908	9,496	147,443,838	47,676,427	1,484	8,683	448	294
1909	11,585	181,976,972	57,388,586	1,871	11,496	450	304
1910	14,911	226,313,958	71,197,654	2,486	13,604	459	305
1911	17,884	289,039,671	82,493,136	2,656	17,133	471	325
1912	20,208	342,584,684	93,592,721	2,795	18,006	503	349
1913	23,299	416,725,357	111,159,616	3,298	21,956	530	363
1914	24,911	454,901,674	123,863,966	3,569	22,459	555	379
1915	27,087	502,076,621	124,632,631	3,547	22,930	526	374
1916	30,110	560,181,108	136,413,408	3,737	23,245	534	407
1917	31,920	594,649,419	142,770,758	4,333	24,434	583	445
1918	36,395	656,935,420	160,301,569	5,532	29,713	721	531
1919	40,969	739,390,012	179,788,560	7,635	37,040	1,133	889
1920	44,635	762,037,360	189,651,320	8,005	39,048	1,572	1,174
1921	44,109	700,697,985	179,427,501	7,078	32,182	1,492	1,146
1922	51,033	809,327,652	214,327,505	7,837	38,102	1,544	1,243
1923	52,972	1,000,708,890	240,279,975	7,962	40,549	1,483	1,180
1924	56,351	1,030,905,658	241,319,095	8,179	43,056	1,525	1,174

¹ Rin = 1/1000 yen = \$0.00010.

Indian Yarn Production

[In pounds]

Source: Department of Statistics, India

FISCAL YEARS ENDING MARCH 31	Counts 1-12	Counts over 12	Counts over 15	Counts 20 and over	Counts over 22	Counts over 32	Total all Counts
1910-11	207,509,950	402,022,486	357,404,069	286,800,386	93,044,789	14,164,373	609,532,436
1911-12	190,645,627	433,677,328	386,253,430	312,258,578	103,612,447	16,535,131	624,322,955
1912-13	239,721,030	448,039,765	396,350,672	319,491,171	111,653,111	16,901,358	687,760,795
1913-14	233,643,390	448,490,863	399,266,359	320,992,248	109,631,349	14,019,139	682,134,253
1914-15	220,194,466	431,314,975	377,146,978	300,656,706	102,540,454	12,769,510	651,509,441
1915-16	260,337,274	461,435,823	404,474,369	319,591,815	106,240,756	12,305,584	721,773,097
1916-17	219,750,231	461,010,063	403,761,898	318,157,008	118,128,025	17,808,941	680,760,294
1917-18	193,374,553	466,977,783	403,005,598	324,052,191	131,274,554	19,096,551	660,352,336
1918-19	161,285,869	453,523,437	391,177,022	314,908,993	130,658,399	14,034,609	614,809,306
1919-20	174,732,119	460,752,829	405,203,195	323,181,427	117,211,723	12,972,539	635,484,948
1920-21	175,376,300	484,271,405	420,948,022	336,252,620	123,042,860	8,890,653	639,647,705
1921-22	197,376,737	495,593,803	427,303,790	344,573,122	133,937,430	9,493,469	692,970,540
1922-23	191,167,444	514,467,085	444,036,923	360,416,448	132,757,809	9,090,148	705,634,529
1923-24	143,895,315	464,218,704	393,023,812	315,354,051	128,114,271	12,512,473	608,114,019
1924-25	165,030,312	554,359,682	476,154,435	243,579,743	154,756,501	16,088,692	719,389,994

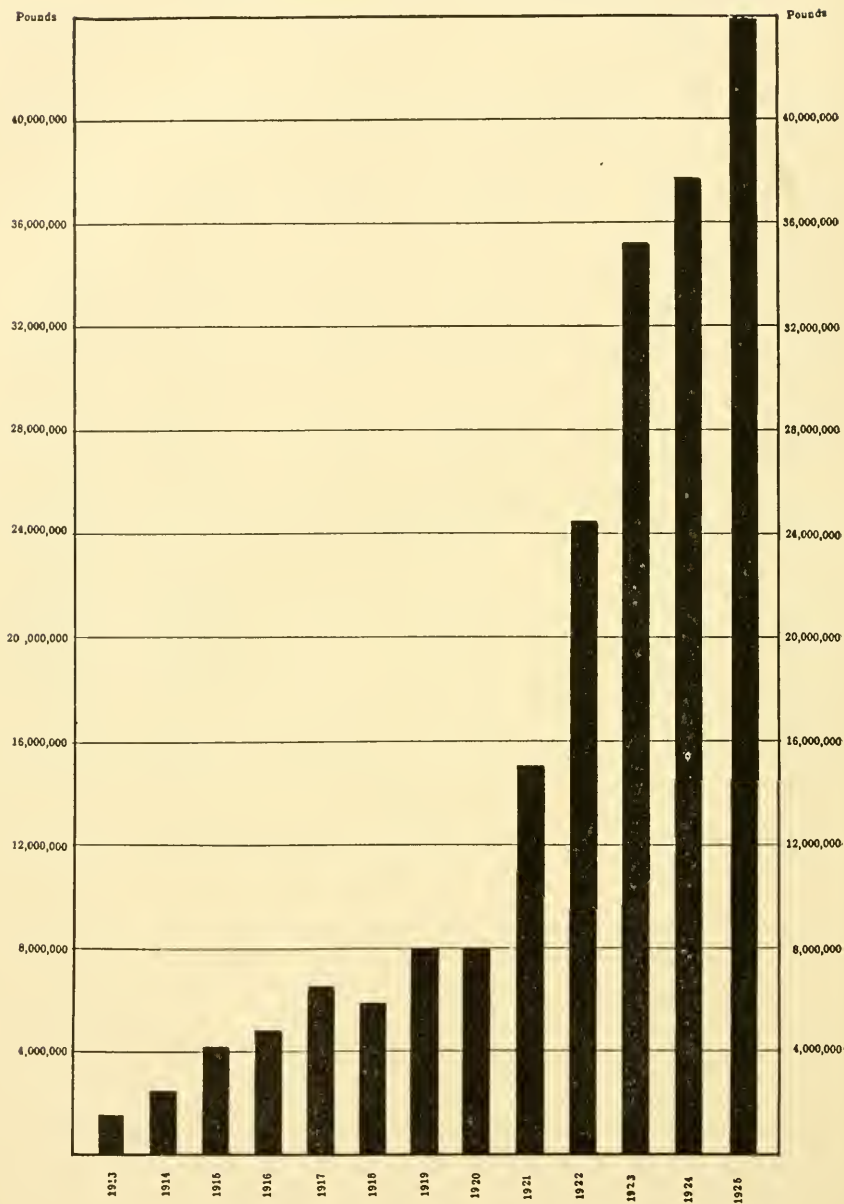
World Rayon Production by Countries

Source: United States Department of Commerce

	1922 (Pounds)	1923 (Pounds)	1924 (Pounds)	1925 ¹ (Pounds)
United States	23,500,000	35,400,000	39,000,000	54,700,000
Italy	6,292,000	10,000,000	18,480,000	30,000,000
England	15,340,000	16,500,000	23,947,000	28,000,000
Germany	12,584,000	13,000,000	23,672,000	27,100,000
France	6,292,000	7,700,000	12,333,200	14,400,000
Belgium	6,292,000	6,000,000	8,874,800	11,100,000
Switzerland	1,887,600	3,700,000	4,004,000	5,500,000
Holland	2,516,800	2,600,000	3,336,000	4,400,000
Austria	1,573,000	—	2,640,000	3,500,000
Poland	943,800	—	1,540,000	2,200,000
Czecho-Slovakia	629,200	—	1,293,600	2,000,000
Japan	—	—	1,199,000	1,400,000
Hungary	1,887,600	—	616,000	700,000
Spain	—	—	184,800	220,000
Sweden	—	—	176,000	176,000
Russia	—	—	88,000	88,000
Other countries	—	2,100,000	—	—
Total	79,738,000	97,000,000	141,414,000	185,484,000

¹ Estimated.

United States Production of Rayon



United States Production and Imports of Rayon

Source: Silk Association of America and Department of Commerce

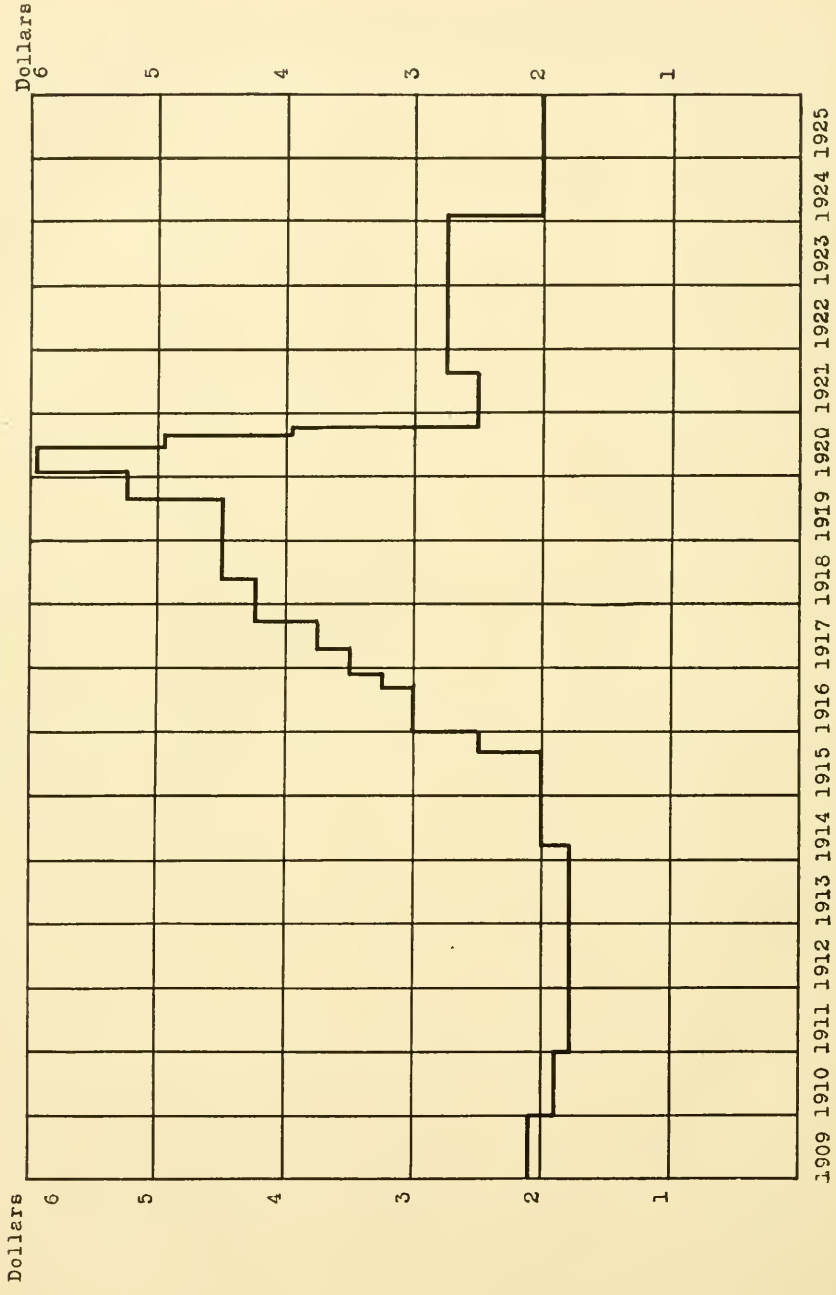
YEAR	Production (Pounds)	Imports (Pounds)	Import Valuation (Per Pound)
1913	1,566,000	2,305,000	—
1914	2,445,000	2,923,000	\$1.25
1915	4,111,000	2,718,000	1.21
1916	4,744,000	864,000	1.95
1917	6,687,000	552,000	2.55
1918	5,828,000	93,099	2.69
1919	8,000,000	1,148,513	4.06
1920	8,000,000	1,846,875	3.44
1921	15,000,000	3,667,180	1.66
1922	24,406,400	2,087,775	1.87
1923	35,380,500	3,906,037	1.73
1924	37,719,600	1,711,987	1.34
1925	48,260,000	7,000,521	1.16

Use of Rayon by Industries

Source: The Viscose Company

	1925 (Per Cent)	1924 (Per Cent)	1923 (Per Cent)
Cotton	26	15	11
Hosiery	28	23	22
Silk goods	16	18	15
Knitted outerwear	5	14	25
Braid	4	8	10
Tapestry	4	3	—
Upholstery goods	—	—	2
Underwear	13	11	5
Lace . . . . .	.1	11	5
Webbing	1	—	—
Plush	1	2	2
Woolen goods	1	1	1
Miscellaneous	—	5	7

Price of Rayon, 1909-1925



The above chart is based on the table on the following page.

List Prices of Rayon Yarn

[Quotations are for 150 denier, A quality, unbleached]

Source: The Viscose Company

1909	\$2.15
1910	1.90
1911	1.80
1912	1.80
1913	1.80
April 1, 1914, to September, 1915	2.00
September, 1915, to January, 1916	2.50
January, 1916, to September, 1916	3.00
September, 1916, to December, 1916	3.25
December, 1916, to May, 1917	3.50
May, 1917, to October, 1917	3.75
October, 1917, to June, 1918	4.25
June, 1918, to September, 1919	4.50
September, 1919, to February, 1920	5.25
February, 1920, to June, 1920	5.95
June, 1920 to September, 1920	4.95
September, 1920, to October, 1920	3.95
October, 1920, to September, 1921	2.50
September, 1921, to February, 1924	2.75
February, 1924, to ———	2.00

Statistical History of the American Cotton Industry

YEAR	Number of Estab- lishments	Value of Products (Thousands)	Employees	ACTIVE SPINDLES (THOUSANDS)		Looms
				Northern States	United States	
1790	-	-	-	-	-	-
1800	-	-	-	-	-	-
1810	-	-	-	-	-	-
1820	-	-	-	-	-	-
1830	-	-	-	-	-	-
1840	1,240	\$46,350	72,119	2,104	2,285	-
1850	1,094	61,869	92,286	3,733	3,998	-
1860	1,091	115,682	122,028	4,912	5,236	126,313
1870	956	177,490	135,369	6,804	7,132	157,310
1871	-	-	-	-	-	-
1872	-	-	-	-	-	-
1873	-	-	-	-	-	-
1874	-	-	-	-	-	-
1875	-	-	-	-	-	-
1876	-	-	-	-	-	-
1877	-	-	-	-	-	-
1878	-	-	-	-	-	-
1879	756	192,090	174,659	-	-	-
1880	-	-	-	10,092	10,653	225,759
1881	-	-	-	-	-	-
1882	-	-	-	-	-	-
1883	-	-	-	11,800	12,660	-
1884	-	-	-	12,250	13,300	-
1885	-	-	-	12,250	13,375	-
1886	-	-	-	12,250	13,400	-
1887	-	-	-	12,300	13,500	-
1888	-	-	-	12,300	13,550	-
1889	905	267,982	218,876	12,700	14,060	-
1890	-	-	-	12,814	14,384	324,866
1891	-	-	-	12,900	14,640	-
1892	-	-	-	13,250	15,200	-
1893	-	-	-	13,450	15,550	-
1894	-	-	-	13,500	15,700	-
1895	-	-	-	13,700	16,100	-
1896	-	-	-	13,800	16,650	-
1897	-	-	-	13,900	17,150	-
1898	-	-	-	13,900	17,450	-
1899	1,055	339,200	302,861	14,150	18,100	-

Statistical History of the American Cotton Industry

YEAR	Crop (Bales) (Thousands)	CONSUMPTION BY MILLS (BALES) (THOUSANDS)		Acreage Picked (Thousands)	Yield per Acre (Pounds)	Upland, Average Price	Standard Sheeting, Average Price
		Northern States	United States				
1790	3	—	—	—	—	26.0	—
1800	73	—	—	—	—	44.0	—
1810	178	—	—	—	—	15.5	—
1820	335	—	—	—	—	14.3	—
1830	732	—	—	—	—	9.7	—
1840	1,348	166	237	—	—	9.5	—
1850	2,136	497	575	—	—	12.1	7.87
1860	3,841	751	845	—	—	13.0	8.75
1870	4,025	728	797	8,885	199	17.0	14.58
1871	2,553	1,072	1,163	7,558	148	16.2	13.00
1872	3,920	977	1,097	8,483	189	21.4	14.27
1873	3,683	1,063	1,201	9,510	180	19.1	13.31
1874	3,941	1,192	1,320	11,764	148	16.2	11.42
1875	5,123	1,071	1,201	11,934	191	15.0	10.41
1876	4,438	1,220	1,354	11,677	168	12.1	8.85
1877	4,370	1,302	1,429	12,133	164	11.3	8.46
1878	5,244	1,345	1,496	12,344	191	10.8	7.80
1879	5,755	1,379	1,561	14,480	181	10.4	7.97
1880	6,343	1,382	1,570	15,951	185	11.8	8.51
1881	5,456	1,713	1,938	16,711	150	10.8	8.51
1882	6,957	1,677	1,964	16,277	186	11.8	8.45
1883	5,701	1,759	2,072	16,778	165	10.1	8.32
1884	5,682	1,537	1,877	17,440	154	11.0	7.28
1885	6,575	1,437	1,753	18,301	164	10.7	6.75
1886	6,446	1,781	2,162	18,455	170	9.4	6.75
1887	7,020	1,687	2,088	18,641	183	10.0	7.15
1888	6,941	1,805	2,261	19,059	180	10.3	7.25
1889	7,473	1,790	2,270	20,175	160	10.4	7.00
1890	8,674	1,979	2,518	19,512	187	11.3	7.00
1891	9,018	2,027	2,640	19,059	179	9.9	6.83
1892	6,664	2,172	2,856	15,911	209	7.8	6.50
1893	7,493	1,652	2,375	19,525	150	8.4	5.90
1894	9,476	1,580	2,291	23,688	195	7.7	5.11
1895	7,161	2,019	2,871	20,185	156	6.2	5.74
1896	8,533	1,605	2,505	23,273	185	8.1	5.45
1897	10,898	1,793	2,792	24,320	183	7.7	4.73
1898	11,189	2,211	3,465	24,967	221	6.3	4.20
1899	9,345	2,217	3,632	24,327	184	6.1	5.28

Statistical History of the American Cotton Industry — (Concluded)

YEAR	Number of Estab- lishments	Value of Products (Thousands)	Employees	ACTIVE SPINDLES (THOUSANDS)		Looms
				Northern States	United States	
1900	—	—	—	15,104	19,472	455,752
1901	—	—	—	14,700	20,200	—
1902	—	—	—	15,000	21,400	—
1903	—	—	—	15,100	22,000	—
1904	1,154	450,468	315,874	15,200	22,850	540,910
1905	—	—	—	16,056	23,687	—
1906	—	—	—	16,255	25,250	—
1907	—	—	—	16,847	26,375	—
1908	—	—	—	17,304	27,505	—
1909	1,324	628,392	378,880	17,589	28,018	632,963
1910	—	—	—	17,773	28,267	—
1911	—	—	—	18,438	29,523	—
1912	—	—	—	18,996	30,579	—
1913	—	—	—	19,293	31,520	—
1914	1,328	701,301	393,404	19,396	32,107	672,754
1915	—	—	—	19,008	31,964	—
1916	—	—	—	19,424	32,806	—
1917	—	—	—	19,733	33,889	—
1918	—	—	—	20,014	34,543	—
1919	1,496	2,195,566	446,852	20,085	34,931	692,169
1920	—	—	—	20,250	35,481	—
1921	1,527	1,330,263	425,817	20,338	36,047	—
1922	—	—	—	19,802	35,708	—
1923	1,643	2,010,141	497,378	19,950	36,260	—
1924	—	—	—	18,905	35,849	—
1925	—	—	—	17,740	35,032	—

The figures in this table are not all precisely comparable throughout the entire period shown but are presented to show in a general way the changes which have taken place in the industry. The data are from various sources, largely official.

Statistical History of the American Cotton Industry —
(Concluded)

YEAR	Crop (Bales) (Thousands)	CONSUMPTION BY MILLS (BALES) (THOUSANDS)		Acreage Picked (Thousands)	Yield per Acre (Pounds)	Upland, Average Price	Standard Sheeting, Average Price
		Northern States	United States				
1900 . .	10,123	2,350	3,873	24,933	194	9.1	6.05
1901 . .	9,676	1,964	3,547	26,774	170	8.1	5.54
1902 . .	10,827	2,066	4,083	27,175	187	8.2	5.48
1903 . .	10,046	1,966	3,924	27,052	174	12.2	6.25
1904 . .	13,680	2,046	3,935	31,215	206	8.7	7.13
1905 . .	10,805	2,139	4,279	27,110	187	10.9	7.00
1906 . .	13,595	2,536	4,909	31,374	203	10.0	7.25
1907 . .	11,375	2,574	4,985	29,660	179	11.5	7.62
1908 . .	13,587	2,352	4,539	32,444	195	9.2	6.75
1909 . .	10,315	2,687	5,241	30,938	154	14.3	7.37
1910 . .	12,006	2,507	4,799	32,403	171	14.0	7.87
1911 . .	16,250	2,377	4,705	36,045	208	9.6	7.98
1912 . .	14,313	2,656	5,368	34,283	191	11.5	7.79
1913 . .	14,795	2,825	5,786	37,089	182	12.5	8.05
1914 . .	16,992	2,861	5,885	36,832	209	7.3	7.68
1915 . .	12,123	2,816	6,009	31,412	170	11.2	6.74
1916 . .	12,781	3,301	7,278	34,985	157	17.3	9.18
1917 . .	12,428	3,323	7,658	33,841	160	27.1	14.50
1918 . .	12,970	3,271	7,685	36,008	160	28.8	23.38
1919 . .	12,029	2,733	6,224	33,566	162	35.4	22.60
1920 . .	13,880	3,048	6,762	35,878	178	15.8	23.08
1921 . .	8,351	2,257	5,409	30,509	125	16.9	—
1922 . .	10,370	2,571	6,549	33,036	141	22.9	13.63
1923 . .	10,808	2,823	7,312	37,123	131	28.7	—
1924 . .	14,497	2,167	6,217	41,360	157	22.9	—
1925 . .	—	2,392	6,852	45,945	166	—	—

Legal Working Hours for Women

Source: United States Department of Labor

STATE	Daily	Weekly
Alabama	No limitation	No limitation
Arizona	8	56
Arkansas	9	54
California	8	48
Colorado	8	56
Connecticut	10	55
Delaware	10	55
District of Columbia	8	48
Florida	No limitation	No limitation
Georgia	10	60
Idaho	9	63
Illinois	10	70
Indiana	No limitation	No limitation
Iowa	No limitation	No limitation
Kansas	9	49½
Kentucky	10	60
Louisiana	10	60
Maine	9	54
Maryland	10	60
Massachusetts	9	48
Michigan	9	54
Minnesota	9½	54
Mississippi	10	55
Missouri	9	54
Montana	8	56
Nebraska	9	54
Nevada	8	56
New Hampshire	10½	54
New Jersey	10	54
New Mexico	8	56
New York	9	54
North Carolina	11	60
North Dakota	8½	48
Ohio	9	50
Oklahoma	9	54
Oregon	9	48
Pennsylvania	10	54
Rhode Island	10	54
South Carolina	10	55
South Dakota	10	54
Tennessee	10½	57
Texas	9	54
Utah	8	48
Vermont	10½	56
Virginia	10	60
Washington	8	56
West Virginia	No limitation	No limitation
Wisconsin	9	50
Wyoming	8½	56

NOTE. — The above table applies to women employed in mechanical and manufacturing establishments. Many states provide for overtime in seasonal industries.

Approximate Value of Foreign Money

Source: The Merchants National Bank of Boston

COUNTRY	Monetary Unit and Fractions	Approximate Par Value of Foreign Unit in United States Dollars	Approximate Value of United States Dollar in Foreign Unit at Par
Argentina ¹	{ 1 Gold peso = 100 Centavos	\$0.9648	1.0362 Gold pesos
	1 Paper peso = 100 Centavos	.4245	2.3557 Paper pesos
Austria	1 Krone = 100 Hellers	.2026	4.9351 Kronen
Belgium	1 Franc = 100 Centimes	.1930	5.1813 Francs
Bolivia	1 Boliviano = 100 Centavos	.3893	2.5686 Bolivianos
Brazil ²	{ 1 Gold milreis = 1,000 Reis	.5462	1.8308 Gold milreis
	1 Paper milreis = 1,000 Reis	.3244	3.0823 Paper milreis
Bulgaria	1 Lev = 100 Stotinki	.1930	5.1813 Leva
Chile ³	1 Peso = 100 Centavos	.3650	2.7397 Pesos
China ⁴	-	-	-
Colombia	1 Peso = 100 Centavos	.9733	1.0274 Pesos
Czecho-Slovakia	1 Krone = 100 Hellers	.2026	4.9351 Kronen
Denmark	1 Krone = 100 Ore	.2680	3.7313 Kroner
Ecuador	1 Sucre = 100 Centavos	.4867	2.0548 Sucres
Egypt	1 Egyptian pound = 100 Piastres	4.9431	.2023 Egyptian pounds
Finland	1 Markka = 100 Pennia	.1930	5.1813 Markka
France	1 Franc = 100 Centimes	.1930	5.1813 Francs
Germany	1 Mark = 100 Pfennige	.2382	4.1979 Marks
Greece	1 Drachma = 100 Lepta	.1930	5.1813 Drachmas
Great Britain	{ 1 Pound sterling = 20 Shillings	4.8666	0-4-11 Pounds sterling
	1 Shilling = 12 Pence	.2433	4.1101 Shillings
Holland	1 Guilder or florin = 100 Cents	.4020	2.4878 Guilders
Honduras	1 Peso = 100 Centavos	.4340	2.3041 Pesos
Hungary	1 Krone = 100 Fillers	.2026	4.9351 Kronen
India	{ 1 Rupee = 16 Annas	.4867	2.0530 Rupees
	1 Anna = 12 Pies		
Italy	1 Lira = 100 Centesimi	.1930	5.1813 Lire
Japan	1 Yen = 100 Sen	.4985	2.0062 Yen
	1 Dinar = 100 Paras	.1930	5.1813 Dinars
Jugo-Slavia	{ 4 Kronen = 1 Dinar		
	1 Krone = 100 Hellers		
Mexico	1 Peso = 100 Centavos	.4985	2.0062 Pesos
Norway	1 Krone = 100 Ore	.2680	3.7313 Kroner
Paraguay ⁵	1 Peso = 100 Centavos	.9980	1.002 Pesos
Persia	1 Kran = 20 Shahis	.0733	13.6425 Krans
Peru	{ 1 Peruvian pound = 10 Soles	4.8666	2.053 Peruvian pounds
	1 Sol = 100 Centavos	.4867	2.0533 Soles
Philippines	1 Peso = 100 Centavos	.5000	2.000 Pesos
Poland	1 Polish mark = 100 Fenigow	.2382	4.1979 Polish marks
Portugal	1 Escudo = 100 Centavos	1.0805	.9254 Escudos
Rumania	1 Leu = 100 Bani	.1930	5.1813 Lei
Russia	1 Rouble = 100 Kopeks	.5146	1.9434 Roubles
Serbia	1 Dinar = 100 Paras	.1930	5.1813 Dinars
Spain	1 Peseta = 100 Centimos	.1930	5.1813 Pesetas
Sweden	1 Krona = 100 Ore	.2680	3.7313 Kronor
Switzerland	1 Franc = 100 Centimes	.1930	5.1813 Francs
Turkey	1 Piastre = 40 Paras	.0439	22.7272 Piastres
Uruguay	1 Peso = 100 Centesimos	1.0342	.9671 Pesos
Venezuela	1 Bolivar = 100 Centimos	.1930	5.1813 Bolivares

¹ Paper is convertible into gold and *vice versa* at the fixed rate of 44 gold pesos to 100 paper pesos.

² Gold currency is theoretical; the actual currency is the paper milreis, which by law is supposed to equal 16 English pence, but which, being inconvertible, fluctuates in value.

³ Actual circulation is the paper peso, which by law is supposed to equal 18 English pence, but which, being inconvertible, fluctuates in value.

⁴ There is no uniform currency in China, the Mexican silver dollar being mostly used. The British dollar, termed Hongkong currency, has the same legal value as the Mexican dollar in Hongkong and the Straits settlements, and usually prevails at about 50 cents United States gold.

⁵ Nominally the monetary system is based on gold pesos of the above value. Actual circulation, however, is practically confined to paper notes, which, being irredeemable, have depreciated to the approximate value of 4 cents United States currency.

NOTE. — Foreign money values are all subject to fluctuations.



TECHNICAL

FOREWORD

The Technical Section of the Year Book does not contain any radical changes from the previous editions, but has been added to in accordance with suggestions made by the Technical Committee. Many more tables and charts of engineering nature could be added that would be of value to the industry, but as these are available from other sources it is thought best to use only those that would find most frequent use.

The material has been presented as far as possible in a logical order, but it must be realized that as these are a collection of selected charts and tables covering, in a concise manner, many questions of a technical nature, there can be no real sequence.

A work of this sort is never complete, and it is the intention of the Committee to make such changes as seem desirable to keep the scope of the section so that it will be of value to the cotton manufacturer.

E. D. WALEN, *Chairman,*
Technical Committee.

INTRODUCTION

The Technical Section of the Year Book is a collection of many of the standard reference tables and information of use to the cotton manufacturer.

The reference data include weight equivalents, conversion tables, power transmission data, roving, yarn and cloth tables, humidity charts and tables, knitting information, textile test methods and sales notes. The new material added this year includes a conversion table for converting from Fahrenheit to Centigrade, and for converting from cotton yarn numbers to denier, and extracts from the thrown silk rules approved by the Silk Association of America.

Acknowledgment has been made in most cases where the data are used. In addition we are indebted to Prof. George B. Haven, Gilbert R. Merrill, The Cotton Research Company, Textile World, Saco-Lowell Shops, Whitin Machine Works, Draper Corporation, H. & B. American Machine Company, U. S. Testing Company, The Silk Association of America, and the American Society for Testing Materials for their courtesy in giving permission to republish certain of their tables.

Common Abbreviations

Approved by American Society for Testing Materials

(a) *Units of Length*

Centimeter	cm.
Decimeter	dm.
Foot	ft.
Inch	in.
Kilometer	km.
Linear	lin.
Meter	spell out
Mile	spell out
Millimeter	mm.
Yard	yd.

(b) *Units of Area*

Circular mil	cir. mil.
Square	sq.
Square foot	sq. ft.
Square inch	sq. in.

(c) *Units of Volume*

Barrel	bb.
Bushel	bu.
Centiliter	cl.
Cubic	cu.
Cubic centimeter	cc.
Decaliter	dal.
Deciliter	dl.
Gallon	gal.
Hectoliter	hl.
Liter	spell out
Milliliter	ml.
Pint	pt.
Quart	qt.

(d) *Units of Weight*

Centigram	cg.
Decigram	dg.
Grain	gr.
Gram	g.
Kilogram	kg.
Milligram	mg.
Ounce	oz.
Pound	lb.
Ton	spell out

(e) *Units of Time*

Afternoon	P.M.
Day	spell out
Forenoon	A.M.
Hour	hr.

Minute	min.
Month	spell out
Second	sec.
Week	spell out
Year	spell out

(f) *Electrical and Magnetic Terms*

Ampere	spell out
Electric horse power	e. h. p.
Electromotive force	e. m. f.
Magnetomotive force	m. m. f.
Ohm	spell out
Volt	spell out

(g) *Units of Power*

Brake horse power	b. h. p.
Horse power	h. p.
Indicated horse power	i. h. p.
Kilowatt	kw.
Watt	spell out

(h) *Units of Heat*

British Thermal Unit	B. t. u.
Calorie	cal.
Centigrade	C.
Fahrenheit	F.
Degree	°

(i) *Miscellaneous Technical Terms*

Birmingham wire gage	B. w. g.
Brown & Sharpe (gage)	B. & S.
Chemically pure	c. p.
Degree (angular measure)	deg.
Diameter	spell out
Parts per million	p. p. m.
Revolutions per minute	r. p. m.
Specific gravity	sp. gr.
Tensile strength	tens. str.
United States (gage)	U. S.

(j) *Miscellaneous General Terms*

Figure	Fig.
Number	No.
Per	spell out
Per centum	per cent
Proceedings	spell out
Plate	spell out
Table	spell out
Transactions	spell out
Volume	Vol.

Metric Conversion Table

Millimeters $\times .03937$ = inches.	Liters $\times 61.022$ = cubic inches.
Millimeters $\div 25.4$ = inches.	Liters $\times .2642$ = gallons (231 cubic inches)
Centimeters $\times .3937$ = inches.	Liters $\div 28.316$ = cubic feet.
Centimeters $\div 2.54$ = inches.	Hectoliters $\times .131$ = cubic yards.
Meters $\times 39.37$ = inches.	Grams $\times 15.432$ = grains.
Meters $\times 3.281$ = feet.	Grams $\div 981$ = dynes.
Kilometers $\times .621$ = miles.	Grams $\div 28.35$ = ounces avoirdupois.
Square Centimeters $\times .155$ = square inches.	Kilo-grams $\times 2.2046$ = pounds.
Square Meters $\times 10.764$ = square feet.	Kilo-grams $\div 907.2$ = tons (2,000 pounds)
Hectare $\times 2.471$ = acres.	Kilo-Watts $\times 1.34$ = horse power.
Cubic Centimeters $\div 16.383$ = cubic inches.	Watts $\div 746$ = horse power.
Cubic Meters $\times 35.315$ = cubic feet.	Calorie $\times 3.968$ = British Thermal Unit.
Cubic Meters $\times 1.308$ = cubic yards.	Gravity Paris = 980.94 centimeters per second.

Reference Data

- 1 Pint of water weighs 1.045 pounds.
 1 Gallon of water = .1339 cubic feet = 8.36 pounds of water at 62° F.
 1 Mile = 5,280 feet.
 1 Pound (avoirdupois) = 7,000 grains = 453.6 grams.
 1 Horse Power = 33,000 foot pounds of work done per minute = 746 watts.
 The pressure of one atmosphere = 14.7 pounds per square inch, = 2,116 pounds per square foot = a column of mercury 760 millimeters high.
 A column of water 2.3 feet high corresponds to a pressure of 1 pound per square inch.
 Area of triangle = base \times half the perpendicular height.
 Area of circle = diameter squared $\times 0.7854$.
 Circumference of circle = diameter $\times 3.14159$.
 Diameter of circle $\times .8862$ = the side of an equal square.
 Side of a square $\times 1.12837$ = the diameter of equal circle.
 Square root of an area $\times 1.12837$ = the diameter of equal circle.
 Surface of cylinder = area of both ends + length \times circumference.
 Surface of cone = area of base + $\frac{1}{2}$ (slant height \times circumference of base).
 Surface of sphere = diameter squared $\times 3.14159$.
 Solidity of sphere = diameter cubed $\times .5236$.
 Solidity of cylinder = area of one end \times length.

Weight Equivalents

Corrected to second decimal place

1 ounce = 437.5 grains = 28.35 grams	9 ounces = 3937.5 grains = 255.14 grams
1½ ounces = 656.25 grains = 42.52 grams	9½ ounces = 4156.25 grains = 269.32 grams
2 ounces = 875.0 grains = 56.70 grams	10 ounces = 4375.0 grains = 283.50 grams
2½ ounces = 1093.75 grains = 70.87 grams	10½ ounces = 4593.75 grains = 297.67 grams
3 ounces = 1312.5 grains = 85.05 grams	11 ounces = 4812.5 grains = 311.84 grams
3½ ounces = 1531.25 grains = 99.22 grams	11½ ounces = 5031.25 grains = 326.02 grams
4 ounces = 1750.0 grains = 113.40 grams	12 ounces = 5250.0 grains = 340.19 grams
4½ ounces = 1968.75 grains = 127.57 grams	12½ ounces = 5468.75 grains = 354.37 grams
5 ounces = 2187.5 grains = 141.75 grams	13 ounces = 5687.5 grains = 368.54 grams
5½ ounces = 2406.25 grains = 155.92 grams	13½ ounces = 5906.25 grains = 382.71 grams
6 ounces = 2625.0 grains = 170.10 grams	14 ounces = 6125.0 grains = 396.89 grams
6½ ounces = 2843.75 grains = 184.27 grams	14½ ounces = 6343.75 grains = 411.06 grams
7 ounces = 3062.5 grains = 198.44 grams	15 ounces = 6562.5 grains = 425.24 grams
7½ ounces = 3281.25 grains = 212.62 grams	15½ ounces = 6781.25 grains = 439.41 grams
8 ounces = 3500.0 grains = 226.79 grams	16 ounces = 7000.0 grains = 453.59 grams
8½ ounces = 3718.75 grains = 240.97 grams	

Circumferences of Circles, advancing by Eighths

DIAMETER (INCHES)	CIRCUMFERENCES							
	0	⅛	¼	⅜	½	⅝	¾	⅞
0	—	0.3927	0.7854	1.178	1.570	1.963	2.356	2.748
1	3.1416	3.531	3.927	4.319	4.712	5.105	5.497	5.890
2	6.283	6.675	7.068	7.461	7.854	8.246	8.639	9.032
3	9.424	9.817	10.21	10.60	10.99	11.38	11.78	12.17
4	12.56	12.95	13.35	13.74	14.13	14.52	14.92	15.31
5	15.70	16.10	16.49	16.88	17.27	17.67	18.06	18.45
6	18.84	19.24	19.63	20.02	20.42	20.81	21.20	21.59

Circum. of a circle — dia. × 3.1416.

Conversion of Thermometer Readings

F°	C°	F°	C°	F°	C°	F°	C°	F°	C°	F°	C°
—40	—40.00	30	—1.11	80	26.67	250	121.11	500	260.00	900	482.22
—38	—38.89	31	—0.56	81	27.22	255	123.89	505	262.78	910	487.78
—36	—37.78	32	0.00	82	27.78	260	126.67	510	265.56	920	493.33
—34	—36.67	33	0.56	83	28.33	265	129.44	515	268.33	930	498.89
—32	—35.56	34	1.11	84	28.89	270	132.22	520	271.11	940	504.44
—30	—34.44	35	1.67	85	29.44	275	135.00	525	273.89	950	510.00
—28	—33.33	36	2.22	86	30.00	280	137.78	530	276.67	960	515.56
—26	—32.22	37	2.78	87	30.56	285	140.55	535	279.44	970	521.11
—24	—31.11	38	3.33	88	31.11	290	143.33	540	282.22	980	526.67
—22	—30.00	39	3.89	89	31.67	295	146.11	545	285.00	990	532.22
—20	—28.89	40	4.44	90	32.22	300	148.89	550	287.78	1000	537.78
—18	—27.78	41	5.00	91	32.78	305	151.67	555	290.55	1050	565.56
—16	—26.67	42	5.56	92	33.33	310	154.44	560	293.33	1100	593.33
—14	—25.56	43	6.11	93	33.89	315	157.22	565	296.11	1150	621.11
—12	—24.44	44	6.67	94	39.44	320	160.00	570	298.89	1200	648.89
—10	—23.33	45	7.22	95	35.00	325	162.78	575	301.67	1250	676.67
—8	—22.22	46	7.78	96	35.56	330	165.56	580	304.44	1300	704.44
—6	—21.11	47	8.33	97	36.11	335	168.33	585	307.22	1350	732.22
—4	—20.00	48	8.89	98	36.67	340	171.11	590	310.00	1400	760.00
—2	—18.89	49	9.44	99	37.22	345	173.89	595	312.78	1450	787.78
0	—17.78	50	10.00	100	37.78	350	176.67	600	315.56	1500	815.56
1	—17.22	51	10.56	105	40.55	355	179.44	610	321.11	1550	843.33
2	—16.67	52	11.11	110	43.33	360	182.22	620	326.67	1600	871.11
3	—16.11	53	11.67	115	46.11	365	185.00	630	332.22	1650	898.89
4	—15.56	54	12.22	120	48.89	370	187.78	640	337.78	1700	926.67
5	—15.00	55	12.78	125	51.67	375	190.55	650	343.33	1750	954.44
6	—14.44	56	13.33	130	54.44	380	193.33	660	348.89	1800	982.22
7	—13.89	57	13.89	135	57.22	385	196.11	670	354.44	1850	1010.00
8	—13.33	58	14.44	140	60.00	390	198.89	680	360.00	1900	1037.78
9	—12.78	59	15.00	145	62.78	395	201.67	690	365.56	1950	1065.56
10	—12.22	60	15.56	150	65.56	400	204.44	700	371.11	2000	1093.33
11	—11.67	61	16.11	155	68.33	405	207.22	710	376.67	2050	1121.11
12	—11.11	62	16.67	160	71.11	410	210.00	720	382.22	2100	1148.89
13	—10.56	63	17.22	165	73.89	415	212.78	730	387.78	2150	1176.67
14	—10.00	64	17.78	170	76.67	420	215.56	740	393.33	2200	1204.44
15	—9.44	65	18.33	175	79.44	425	218.33	750	398.89	2250	1232.22
16	—8.89	66	18.89	180	82.22	430	221.11	760	404.44	2300	1260.00
17	—8.33	67	19.44	185	85.00	435	223.89	770	410.00	2350	1287.78
18	—7.78	68	20.00	190	87.78	440	226.67	780	415.56	2400	1315.56
19	—7.22	69	20.56	195	90.55	445	229.44	790	421.11	2450	1343.33
20	—6.67	70	21.11	200	93.33	450	232.22	800	426.67	2500	1371.11
21	—6.11	71	21.67	205	96.11	455	235.00	810	432.22	2550	1398.89
22	—5.56	72	22.22	210	100.00	460	237.78	820	437.78	2600	1426.67
23	—5.00	73	22.78	215	101.67	465	240.55	830	443.33	2650	1454.44
24	—4.44	74	23.33	220	104.44	470	243.33	840	448.89	2700	1482.22
25	—3.89	75	23.89	225	107.22	475	246.11	850	454.44	2750	1510.00
26	—3.33	76	24.44	230	110.00	480	248.89	860	460.00	2800	1537.78
27	—2.78	77	25.00	235	112.78	485	251.67	870	465.56	2850	1565.56
28	—2.22	78	25.56	240	115.56	490	254.44	880	471.11	2900	1593.33
29	—1.67	79	26.11	245	118.33	495	257.22	890	476.67	2950	1621.11

Specific Gravity, Degrees Twaddle and Degrees Beaumé

English Standard 15°c.

Twaddle.	Beaumé	Specific Gravity	Twaddle	Beaumé	Specific Gravity	Twaddle	Beaumé	Specific Gravity	Twaddle	Beaumé	Specific Gravity
0	0	1.000	44	26.0	1.220	88	44.1	1.440	132	57.4	1.660
1	0.7	1.005	45	26.4	1.225	89	44.4	1.445	133	57.7	1.665
2	1.4	1.010	46	26.9	1.230	90	44.8	1.450	134	57.9	1.670
3	2.1	1.015	47	27.4	1.235	91	45.1	1.455	135	58.2	1.675
4	2.7	1.020	48	27.9	1.240	92	45.4	1.460	136	58.4	1.680
5	3.4	1.025	49	28.4	1.245	93	45.8	1.465	137	58.7	1.685
6	4.1	1.030	50	28.8	1.250	94	46.1	1.470	138	58.9	1.690
7	4.7	1.035	51	29.3	1.255	95	46.4	1.475	139	59.2	1.695
8	5.4	1.040	52	29.7	1.260	96	46.8	1.480	140	59.5	1.700
9	6.0	1.045	53	30.2	1.265	97	47.1	1.485	141	59.7	1.705
10	6.7	1.050	54	30.6	1.270	98	47.4	1.490	142	60.0	1.710
11	7.4	1.055	55	31.1	1.275	99	47.8	1.495	143	60.2	1.715
12	8.0	1.060	56	31.5	1.280	100	48.1	1.500	144	60.4	1.720
13	8.7	1.065	57	32.0	1.285	101	48.4	1.505	145	60.6	1.725
14	9.4	1.070	58	32.4	1.290	102	48.7	1.510	146	60.9	1.730
15	10.0	1.075	59	32.8	1.295	103	49.0	1.515	147	61.1	1.735
16	10.6	1.080	60	33.3	1.300	104	49.4	1.520	148	61.4	1.740
17	11.2	1.085	61	33.7	1.305	105	49.7	1.525	149	61.6	1.745
18	11.9	1.090	62	34.2	1.310	106	50.0	1.530	150	61.8	1.750
19	12.4	1.095	63	34.6	1.315	107	50.3	1.535	151	62.1	1.755
20	13.0	1.100	64	35.0	1.320	108	50.6	1.540	152	62.3	1.760
21	13.6	1.105	65	35.4	1.325	109	50.9	1.545	153	62.5	1.765
22	14.2	1.110	66	35.8	1.330	110	51.2	1.550	154	62.8	1.770
23	14.9	1.115	67	36.2	1.335	111	51.5	1.555	155	63.0	1.775
24	15.4	1.120	68	36.6	1.340	112	51.8	1.560	156	63.2	1.780
25	16.0	1.125	69	37.0	1.345	113	52.1	1.565	157	63.5	1.785
26	16.5	1.130	70	37.4	1.350	114	52.4	1.570	158	63.7	1.790
27	17.1	1.135	71	37.8	1.355	115	52.7	1.575	159	64.0	1.795
28	17.7	1.140	72	38.2	1.360	116	53.0	1.580	160	64.2	1.800
29	18.3	1.145	73	38.6	1.365	117	53.3	1.585	161	64.4	1.805
30	18.8	1.150	74	39.0	1.370	118	53.6	1.590	162	64.6	1.810
31	19.3	1.155	75	39.4	1.375	119	53.9	1.595	163	64.8	1.815
32	19.8	1.160	76	39.8	1.380	120	54.1	1.600	164	65.0	1.820
33	20.3	1.165	77	40.1	1.385	121	54.4	1.605	165	65.2	1.825
34	20.9	1.170	78	40.5	1.390	122	54.7	1.610	166	65.5	1.830
35	21.4	1.175	79	40.8	1.395	123	55.0	1.615	167	65.7	1.835
36	22.0	1.180	80	41.2	1.400	124	55.2	1.620	168	65.9	1.840
37	22.5	1.185	81	41.6	1.405	125	55.5	1.625	169	66.1	1.845
38	23.0	1.190	82	42.0	1.410	126	55.8	1.630	170	66.3	1.850
39	23.5	1.195	83	42.3	1.415	127	56.0	1.635	171	66.5	1.855
40	24.0	1.200	84	42.7	1.420	128	56.3	1.640	172	66.7	1.860
41	24.5	1.205	85	43.1	1.425	129	56.6	1.645	173	67.0	1.865
42	25.0	1.210	86	43.4	1.430	130	56.9	1.650			
43	25.5	1.215	87	43.8	1.435	131	57.1	1.655			

Decimal Equivalents of Common Fractions

1	$\frac{1}{2}$ s	$\frac{1}{4}$ s	8ths	16s	32ds	64s	Decimal Equivalent
1	—	—	—	—	—	—	.015625
—	—	—	—	—	—	1	.03125
—	—	—	—	—	1	2	.046875
—	—	—	—	—	2	3	.0625
—	—	—	—	—	3	4	.078125
—	—	—	—	—	4	5	.09375
—	—	—	—	—	5	6	.109375
—	—	—	—	—	6	7	.125
—	—	—	—	—	7	8	.140625
—	—	—	—	—	8	9	.15625
—	—	—	—	—	9	10	.171875
—	—	—	—	—	10	11	.1875
—	—	—	—	—	11	12	.203125
—	—	—	—	—	12	13	.21875
—	—	—	—	—	13	14	.234375
—	—	—	—	—	14	15	.250
—	—	—	—	—	15	16	.265625
—	—	—	—	—	16	17	.28125
—	—	—	—	—	17	18	.296875
—	—	—	—	—	18	19	.3125
—	—	—	—	—	19	20	.328125
—	—	—	—	—	20	21	.34375
—	—	—	—	—	21	22	.359375
—	—	—	—	—	22	23	.375
—	—	—	—	—	23	24	.390625
—	—	—	—	—	24	25	.40625
—	—	—	—	—	25	26	.421875
—	—	—	—	—	26	27	.4375
—	—	—	—	—	27	28	.453125
—	—	—	—	—	28	29	.46875
—	—	—	—	—	29	30	.484375
—	—	—	—	—	30	31	.500
—	—	—	—	—	31	32	
—	—	—	—	—	32		
—	—	—	—	—	33		
—	—	—	—	—	34		
—	—	—	—	—	35		
—	—	—	—	—	36		
—	—	—	—	—	37		
—	—	—	—	—	38		
—	—	—	—	—	39		
—	—	—	—	—	40		
—	—	—	—	—	41		
—	—	—	—	—	42		
—	—	—	—	—	43		
—	—	—	—	—	44		
—	—	—	—	—	45		
—	—	—	—	—	46		
—	—	—	—	—	47		
—	—	—	—	—	48		
—	—	—	—	—	49		
—	—	—	—	—	50		
—	—	—	—	—	51		
—	—	—	—	—	52		
—	—	—	—	—	53		
—	—	—	—	—	54		
—	—	—	—	—	55		
—	—	—	—	—	56		
—	—	—	—	—	57		
—	—	—	—	—	58		
—	—	—	—	—	59		
—	—	—	—	—	60		
—	—	—	—	—	61		
—	—	—	—	—	62		
—	—	—	—	—	63		
—	—	—	—	—	64		

Electrical Definitions

OHM. — The practical unit of electrical resistance. It is the resistance of a column of mercury one square millimeter in section, 106 centimeters long, at a temperature of 32° Fahr. This is about equivalent to the resistance of 1,000 ft. of No. 10 (B. & S. gage) pure copper wire of a temperature of 75°.

AMPERE. — The practical unit of electrical current. It is the current produced by an electromotive force of one volt in a circuit having a resistance of one ohm. It is the unit of volume or strength of the electric current.

VOLT. — The practical unit of electromotive force or a unit of pressure.

VOLTAGE. — The electromotive force of a circuit reckoned in volts. It is this electromotive force (E. M. F.) which causes a current to flow in a closed circuit.

WATT. — The practical unit of electrical power or rate of working. It is the power due to the current of one ampere flowing under an electromotive force of one volt equal, approximately, to 1/746 of one H. P.

KILOWATT. — A unit of electrical power equal to 1,000 watts. Electrical power is usually expressed in kilowatts. A kilowatt equals 1.34 H. P.

ALTERNATING CURRENT. — A succession of electrical currents which rise and fall in strength and flow alternately in opposite directions at regular intervals. The currents or impulses vary in intensity.

DIRECT CURRENT. — An electrical current constant in direction, though not necessarily so in value.

CONTINUOUS CURRENT. — A direct current constant in both value and direction, as a result of constant pressure.

CANDLE POWER. — The standard candle by which all lights are measured is legally held to be a sperm candle consuming 120 grains of wax per hour. In practical measurements standardized incandescent lamps are more reliable and accurate than the primary standard. According to experiments made by the government of the United States a one candle power white light is visible at a distance of a little more than a mile; one of three candle power is visible at two miles.

In 1909 a photometric unit for an international candle power was established by agreement among Great Britain, France, and America, and approved by other countries. This new unit is 1.6 per cent. less than the candle hitherto the standard in the United States.

LOAD FACTOR. — The load factor of a machine, plant, or system, is the ratio of the average power to the maximum power during a certain period of time. The average power is taken over a certain interval of time, such as a day or a year, and the maximum is taken over a short interval of the maximum load within that interval.

Standard Units of Capacity

a. Boilers ¹	{ One pound of water evaporated into dry steam from and at 212 deg. per hour.
b. Reciprocating Steam Engines	{ One indicated horse power developed in the main cylinders.
c. Steam Turbines	{ One brake horse power delivered by the main shaft.
d. Turbo-generators (including engine-driven generators)	{ One kilowatt delivered at the generator terminals, ² not including kilowatts used by exciter. ³
e. Pumping Machinery	{ One gallon of water discharged to the force main in 24 hr.
f. Compressors, Blowers and Fans	{ One gallon of water discharged per min. ⁴
g. Locomotives	{ One water horse power delivered to the force main, based on the total head, including suction.
h. Gas Producers	{ One cu. ft. of air at 62 deg. and 30 in. ⁵
i. Gas and Oil Engines	{ One air horse power.
j. Waterwheels	{ One indicated horse power developed in the main cylinders.
	{ One dynamometer horse power delivered to the draw-bar.
	{ One pound of dry fuel of given quality consumed per hour.
	{ One cu. ft. per hour of dry gas having a stated quality at 60 deg. and 30 in.
	{ One brake horse power delivered by the main shaft.
	{ One indicated horse power developed in the engine cylinder.
	{ One brake horse power delivered by the main shaft.
	{ One kilowatt delivered at the generator terminals, ² not including kilowatts used by exciter. ³

¹ A subsidiary unit which may be used for stationary boilers is a "Boiler Horse Power," or $34\frac{1}{2}$ lbs. of water evaporated from and at 212 deg. per hour, *i.e.*, from water at 212 deg. into steam at the same temperature. The unit called "Myriawatt" has been suggested by some engineers as a unit of boiler capacity. It is 2 per cent greater than the "Boiler Horse Power" and is equivalent to 34,150 heat units per hour, the "Boiler Horse Power" being 33,479 heat units per hour.

² If switchboard instruments are used for the electrical measurements, correction should be made for the drop in voltage between generator and switchboard, unless the drop is so small as to be negligible.

³ If the exciter current is taken from an outside source the kw. thus supplied, including field rheostat losses, are to be deducted from the total output. Likewise the kw. used by separately driven ventilating fan.

⁴ This unit applies to small pumps and some classes of large-sized pumps.

⁵ 30 in. mercury barometer refers in round numbers to a standard atmosphere at 62 deg. In exact figures, the standard atmosphere is 29.951 in. of mercury at 62 deg.

Heating Formulæ

TO FIND AMOUNT OF RADIATION REQUIRED.

Mill's rule, sometimes called the rule "2-20-200," is as follows: "To find the amount of radiation required to heat a room with low-pressure steam to 70 degrees Fahr., when the outside temperature is at zero, allow 1 sq. ft. of radiation for every 200 cu. ft. of contents, 1 sq. ft. of radiation for every 20 sq. ft. of outside wall surface, and 1 sq. ft. of radiation for every 2 sq. ft. of glass surface (counting outside doors as glass surface). The sum of these results will be the amount of radiation required."

For hot water, add 60 per cent to the results obtained by rule for low-pressure steam; for semi-direct (direct-indirect) radiation, add 25 per cent; for indirect steam, add 50 per cent; for indirect hot water, add 75 per cent to the amount of direct radiation obtained by rule.

These rules do not take into consideration the factors of extraordinary exposure, and such additions should be made to the figures obtained as will compensate for such extraordinary heat losses.

It is considered to be excellent practice to add 10 per cent to the radiation figures for rooms having a northern, northwestern, or western exposure, and when a building is heated intermittently to increase the radiation about 25 per cent, and, provided the building is loosely constructed or without proper weather protection, the amount of radiation figured must be strengthened accordingly.

As an example of estimating, we will consider a room 12 ft. x 16 ft. in area, having a ceiling 10 ft. high; the room contains two single windows 3 ft. x 6 ft. and one large window 5 ft. x 6 ft.:

$$\begin{array}{r} 3 \times 6 = 18 \times 2 = 36 \\ 5 \times 6 = 30 \quad = 30 \end{array}$$

66 sq. ft. windows.

$$\begin{array}{r} 12 + 16 \times 10 = 280 \text{ sq. ft. exposed wall.} \\ 12 \times 16 \times 10 = 1,920 \text{ cu. ft. contents.} \\ 66 \div 2 = 33 \\ 280 \div 20 = 14 \\ 1,920 \div 200 = 9.6 \end{array}$$

56.6 sq. ft. direct radiation required.

The room requires 33 sq. ft. of direct radiation low-pressure steam to compensate for heat losses through cooling by the window glass; 14 sq. ft. for loss through cooling by exposed wall surface, and 9.6 sq. ft. to make up for the loss due to leakage, which is one complete change of air in the room hourly. If hot water is used, add 60 per cent = 90.5 sq. ft.

NOTE. — In practice I have found invariably the amount of heating surface required was somewhat less than would be called for in following the above rule. I consider that the rule is too generous except in greatly exposed situations. — C. H. FISH.

Manila Rope (Medium Lay)

U. S. Standard Specification No. 61

Approximate Diameter (Inches)	Circumference (Inches)	Approximate Feet per Coil	Approximate Gross Weight per Coil (Pounds)	Maximum Net Weight per Foot of Rope (Pounds)	Minimum Feet per Pound	Minimum Breaking Strength (Pounds)	200 D ² (Pounds)
$\frac{3}{16}$ (6 yarns)	$\frac{1}{2}$	3,000	45	.015	66.6	590	7.0
$\frac{1}{4}$ (6 yarns)	$\frac{3}{4}$	2,750	55	.020	50.0	700	12.5
$\frac{5}{16}$ (9 yarns)	1	2,250	65	.029	34.5	1,200	19.5
$\frac{3}{8}$ (12 yarns)	$1\frac{1}{8}$	1,620	66	.041	24.4	1,450	28.2
$\frac{7}{16}$ (15 yarns)	$1\frac{1}{4}$	1,200	70	.054	18.5	1,750	38.2
$\frac{1}{2}$ (18 yarns)	$1\frac{3}{8}$	1,200	80	.064	15.6	2,100	44.0
$\frac{1}{2}$ (21 yarns)	$1\frac{1}{2}$	1,200	90	.074	13.5	2,450	50.0
$\frac{9}{16}$	$1\frac{3}{4}$	1,200	126	.103	9.71	3,150	63.4
$\frac{5}{8}$	2	1,200	160	.131	7.53	4,000	78.2
$\frac{3}{4}$	$2\frac{1}{4}$	1,200	198	.162	6.17	4,900	112.5
$\frac{13}{16}$	$2\frac{1}{2}$	1,200	234	.191	5.23	5,900	132.0
$\frac{7}{8}$	$2\frac{3}{4}$	1,200	270	.221	4.55	7,000	153.0
1	3	1,200	324	.265	3.77	8,200	200.0
$1\frac{1}{16}$	$3\frac{1}{4}$	1,200	378	.309	3.24	9,500	226.0
$1\frac{1}{8}$	$3\frac{1}{2}$	1,200	432	.353	2.83	11,000	252.0
$1\frac{1}{4}$	$3\frac{3}{4}$	1,200	504	.412	2.43	12,500	312.0
$1\frac{5}{16}$	4	1,200	576	.470	2.13	14,200	345.0
$1\frac{3}{8}$	$4\frac{1}{4}$	1,200	648	.529	1.89	16,000	378.0
$1\frac{1}{2}$	$4\frac{1}{2}$	1,200	720	.588	1.70	17,500	450.0
$1\frac{9}{16}$	$4\frac{3}{4}$	1,200	810	.662	1.51	19,500	490.0
$1\frac{5}{8}$	5	1,200	900	.735	1.36	21,500	528.0
$1\frac{3}{4}$	$5\frac{1}{2}$	1,200	1,080	.882	1.13	25,500	612.0
2	6	1,200	1,296	1.06	.943	30,000	800.0
$2\frac{1}{16}$	$6\frac{1}{2}$	1,200	1,500	1.23	.813	34,000	850.0
$2\frac{1}{4}$	7	1,200	1,764	1.44	.694	38,500	1,012.0
$2\frac{1}{2}$	$7\frac{1}{2}$	1,200	2,016	1.65	.606	43,500	1,250.0
$2\frac{5}{8}$	8	1,200	2,304	1.88	.532	49,000	1,380.0
$2\frac{7}{8}$	$8\frac{1}{2}$	1,200	2,580	2.11	.474	55,000	1,660.0
3	9	1,200	2,916	2.38	.420	61,000	1,800.0
$3\frac{1}{8}$	$9\frac{1}{2}$	1,200	3,240	2.65	.377	67,000	1,950.0
$3\frac{1}{4}$	10	1,200	3,600	2.94	.340	73,000	2,120.0
$3\frac{5}{16}$	$10\frac{1}{2}$	1,200	4,000	3.25	.308	79,600	2,190.0
$3\frac{1}{2}$	11	1,200	4,400	3.57	.280	86,400	2,450.0
$3\frac{5}{8}$	$11\frac{1}{2}$	1,200	4,800	3.90	.256	93,600	2,630.0
$3\frac{3}{4}$	12	1,200	5,200	4.24	.236	101,000	2,812.0

Sag of Manila Rope on Driving and Slack Sides

Distance Between Pulleys (Feet)	Sag on Driving Side, All Speeds (Feet)	VELOCITY (FEET PER MINUTE)				
		3,000	4,000	4,500	5,000	5,500
		Sag on Slack Side				
30	.19	.45	.39	.36	.33	.30
40	.34	.80	.69	.64	.59	.53
50	.53	1.2	1.1	1.0	.92	.84
60	.76	1.8	1.7	1.4	1.3	1.2
70	1.0	2.4	2.1	1.9	1.7	1.6
80	1.4	3.2	2.9	2.5	2.3	2.1
90	1.7	4.0	3.5	3.2	3.0	2.7
100	2.1	5.0	4.3	4.0	3.7	3.3
120	3.0	7.2	6.2	5.7	5.3	4.8
140	4.1	9.9	8.5	7.8	7.2	6.6
160	5.4	12.9	11.1	10.2	9.5	8.6

Horse Power transmitted by Different Sized Ropes at Various Speeds

DIAMETER OF ROPE (INCHES).	VELOCITY (FEET PER MINUTE)										
	1,000	1,500	2,000	2,500	3,000	3,500	4,000	4,500	5,000	5,500	6,000
$\frac{3}{4}$	2.3	3.3	4.3	5.2	6.0	6.6	7.2	7.3	7.4	7.3	6.9
$\frac{7}{8}$	3.0	4.5	5.9	7.0	8.2	9.0	9.6	9.8	10.0	9.6	9.0
1	4.0	5.9	7.7	9.2	10.6	11.8	12.7	12.9	13.0	12.7	12.0
$1\frac{1}{8}$	5.0	7.5	9.7	11.6	13.5	14.9	16.0	16.3	16.7	16.5	15.3
$1\frac{1}{4}$	6.3	9.1	12.0	14.3	16.7	18.5	20.0	20.2	20.7	20.1	18.9
$1\frac{3}{8}$	7.5	10.8	14.4	17.4	20.0	22.1	23.7	24.5	24.6	24.0	22.3
$1\frac{1}{2}$	9.0	13.5	17.4	20.7	23.0	26.3	28.7	29.0	29.5	28.6	26.7
$1\frac{5}{8}$	10.5	15.5	20.1	24.3	27.9	30.8	32.9	34.1	34.3	33.3	31.0
$1\frac{3}{4}$	12.3	18.0	23.6	28.2	32.7	36.4	38.5	39.4	40.5	38.7	36.0
2	16.0	23.2	30.6	36.8	42.5	46.7	50.0	51.7	52.8	50.6	47.3
$2\frac{1}{4}$	20.0	29.6	38.6	46.6	53.6	59.2	63.6	65.8	66.3	64.4	60.3
$2\frac{1}{2}$	25.0	36.6	47.7	57.5	66.0	71.2	78.0	80.0	81.0	79.0	73.8

Diameter of Line Shafts

The table on the following page applies to Line Shafts with bearings 8 feet apart. To find the proper diameter for Line Shafts with bearings any other distance apart, multiply the diameter given in the table on the opposite page by the Constant Number corresponding to the distance between bearings in the table below.

Distance Between Bearings		Constant Number	Distance Between Bearings		Constant Number
Feet	Inches		Feet	Inches	
2	0	.354	7	0	.9527
2	6	.418	8	0	1.00
3	0	.479	8	6	1.0465
3	6	.538	9	0	1.092
4	0	.595	9	6	1.137
4	6	.6495	10	0	1.182
5	0	.7029	10	6	1.226
5	6	.755	10	9	1.248
6	0	.806	11	0	1.269
6	6	.856	11	6	1.315
7	0	.905	12	0	1.355

Card Clothing Data

English Counts	Points per Square Foot	American Number of Wire
60s	43,200	28
70s	50,400	30
80s	57,600	31
90s	64,800	32
100s	72,000	33
110s	79,200	34
120s	86,400	35
130s	93,600	36

Counts ordinarily used

	Cylinders	Doffers	Flats
Coarse yarns . . .	90s to 100s	100s to 110s	90s to 100s
Medium yarns . . .	100s to 110s	110s to 120s	100s to 110s

Horse Power transmitted by Cold Rolled Shafting. Second Movers or Line Shafts with Bearings 8 Feet Apart

DIAMETER OF SHAFT	REVOLUTIONS PER MINUTE								
	100	150	200	225	250	275	300	325	350
	Horse Power								
$1\frac{5}{16}$	15	22	29	33	36	40	44	47	51
$2\frac{3}{16}$	21	31	42	47	52	58	63	68	73
$2\frac{7}{16}$	29	43	58	65	72	80	87	94	101
$2\frac{11}{16}$	39	58	78	87	97	107	116	126	136
$2\frac{5}{8}$	51	76	101	114	127	139	152	165	177
$3\frac{3}{16}$	65	97	130	146	162	178	194	210	227
$3\frac{7}{16}$	81	122	162	183	203	223	244	264	284
$3\frac{11}{16}$	100	150	201	226	251	276	301	326	351
$3\frac{5}{8}$	122	183	244	275	305	336	366	397	427
$4\frac{3}{16}$	147	220	294	330	367	404	441	477	514
$4\frac{7}{16}$	175	262	350	393	437	481	524	568	612
$4\frac{11}{16}$	206	309	412	463	515	566	618	669	721
$4\frac{5}{8}$	241	361	481	542	602	662	722	782	843
$5\frac{3}{16}$	279	419	559	629	698	768	838	908	978
$5\frac{7}{16}$	322	482	643	724	804	884	965	1,045	1,125
$5\frac{11}{16}$	368	552	736	828	920	1,012	1,104	1,196	1,288
$5\frac{5}{8}$	419	628	837	942	1,047	1,151	1,256	1,361	1,465
$6\frac{3}{16}$	474	711	948	1,066	1,185	1,303	1,421	1,540	1,658
$6\frac{7}{16}$	534	800	1,067	1,201	1,334	1,467	1,601	1,734	1,867
$6\frac{11}{16}$	598	897	1,196	1,346	1,496	1,645	1,795	1,944	2,094
$6\frac{5}{8}$	668	1,002	1,336	1,503	1,669	1,836	2,003	2,170	2,337
$7\frac{3}{16}$	743	1,114	1,485	1,671	1,857	2,042	2,228	2,414	2,599
$7\frac{7}{16}$	823	1,234	1,646	1,851	2,057	2,263	2,468	2,674	2,880
$7\frac{11}{16}$	909	1,363	1,817	2,045	2,272	2,499	2,726	2,953	3,180
$7\frac{5}{8}$	1,000	1,500	2,000	2,250	2,501	2,751	3,001	3,251	3,501

The above table is figured by the following rule: Multiply the cube of the diameter of the shaft by the revolutions per minute and divide by 50.

Horse Power of Single Belts
Pulleys, 100 R. P. M.; Belt Contact, $\frac{1}{2}$ Circumference

DIAMETER OF PULLEY	WIDTH OF SINGLE BELT IN INCHES							
	3	4	5	6	8	10	12	14
6	.59	.78	.98	1.2	1.6	2.0	2.4	2.7
7	.69	.92	1.2	1.4	1.8	2.3	2.8	3.2
8	.78	1.0	1.3	1.6	2.1	2.6	3.1	3.7
9	.88	1.2	1.5	1.8	2.3	2.9	3.5	4.1
10	.98	1.3	1.6	2.0	2.6	3.3	3.9	4.6
11	1.1	1.4	1.8	2.2	2.9	3.6	4.3	5.0
12	1.2	1.6	2.0	2.4	3.1	3.9	4.7	5.5
13	1.3	1.7	2.1	2.5	3.4	4.2	5.1	5.9
14	1.4	1.8	2.3	2.8	3.7	4.6	5.5	6.4
15	1.5	2.0	2.5	3.0	3.9	4.9	5.9	6.9
16	1.6	2.1	2.6	3.1	4.2	5.2	6.3	7.3
17	1.7	2.2	2.8	3.3	4.5	5.6	6.7	7.8
18	1.8	2.4	3.0	3.5	4.7	5.9	7.1	8.3
19	1.9	2.5	3.1	3.7	5.0	6.2	7.5	8.7
20	2.0	2.6	3.3	3.9	5.2	6.6	7.9	9.2
21	2.1	2.7	3.4	4.1	5.5	6.9	8.2	9.6
22	2.2	2.9	3.6	4.3	5.8	7.2	8.6	10.1
23	2.3	3.0	3.8	4.5	6.0	7.5	9.0	10.5
24	2.4	3.1	3.9	4.7	6.3	7.9	9.4	11.0
25	2.5	3.3	4.1	4.9	6.6	8.2	9.8	11.5
26	2.6	3.4	4.3	5.1	6.8	8.5	10.2	11.9
27	2.7	3.5	4.4	5.3	7.1	8.8	10.6	12.4
28	2.8	3.7	4.6	5.5	7.3	9.2	11.0	12.8
29	2.9	3.8	4.8	5.7	7.6	9.5	11.4	13.3
30	2.9	3.9	4.9	5.9	7.9	9.8	11.8	13.7
31	3.0	4.1	5.1	6.1	8.1	10.2	12.2	14.2
32	3.1	4.2	5.2	6.3	8.4	10.5	12.6	14.7
33	3.2	4.3	5.4	6.5	8.6	10.8	13.0	15.1
34	3.3	4.4	5.6	6.7	8.9	11.1	13.3	15.5
35	3.4	4.6	5.7	6.9	9.2	11.5	13.7	16.0
36	3.5	4.7	5.9	7.1	9.4	11.8	14.2	16.5
37	3.6	4.8	6.1	7.3	9.7	12.1	14.5	16.9
38	3.7	5.0	6.2	7.4	9.9	12.4	14.9	17.4
39	3.8	5.1	6.4	7.7	10.2	12.8	15.3	17.9
40	3.9	5.2	6.6	7.9	10.5	13.1	15.7	18.3
42	4.1	5.5	6.9	8.2	11.0	13.7	16.4	19.2
44	4.3	5.8	7.2	8.6	11.5	14.4	17.3	20.2
46	4.5	6.0	7.5	9.0	12.0	15.0	18.0	21.0
48	4.7	6.3	7.9	9.4	12.6	15.7	18.8	22.0
50	4.9	6.5	8.2	9.8	13.0	16.3	19.6	22.8
52	5.1	6.8	8.5	10.2	13.6	17.0	20.4	23.8
54	5.3	7.1	8.8	10.6	14.2	17.7	21.2	24.7

NOTE. — The above table is based on one horse power per inch of width for each 800 feet per minute belt speed. The horse power for other pulley speeds in proportion.

Horse Power of Double Belts
Pulleys, 100 R. P. M.; Belt Contact, $\frac{1}{2}$ Circumference

DIAMETER OF PULLEY	WIDTH OF DOUBLE BELT IN INCHES							
	3	4	5	6	7	8	9	10
18	2.8	3.8	4.7	5.7	6.6	7.6	8.5	9.4
19	3.0	4.0	5.0	6.0	7.0	8.0	9.0	9.9
20	3.1	4.2	5.2	6.3	7.3	8.4	9.4	10.5
21	3.3	4.4	5.5	6.6	7.7	8.8	9.9	11.0
22	3.5	4.6	5.8	6.9	8.1	9.2	10.4	11.5
23	3.6	4.8	6.0	7.2	8.4	9.6	10.8	12.0
24	3.8	5.0	6.3	7.6	8.8	10.1	11.3	12.6
25	3.9	5.2	6.5	7.8	9.2	10.4	11.8	13.1
26	4.1	5.4	6.8	8.2	9.5	10.9	12.2	13.6
27	4.2	5.7	7.1	8.5	9.9	11.3	12.7	14.1
28	4.4	5.9	7.3	8.8	10.3	11.7	13.2	14.7
29	4.6	6.1	7.6	9.1	10.6	12.1	13.7	15.2
30	4.7	6.3	7.9	9.4	11.0	12.6	14.1	15.7
31	4.9	6.5	8.1	9.7	11.4	13.0	14.6	16.2
32	5.0	6.7	8.4	10.0	11.7	13.4	15.1	16.7
33	5.2	6.9	8.6	10.4	12.1	13.8	15.5	17.3
34	5.3	7.1	8.9	10.7	12.5	14.2	16.0	17.8
35	5.5	7.3	9.2	11.0	12.8	14.7	16.5	18.3
36	5.7	7.5	9.4	11.3	13.2	15.1	17.0	18.9
37	5.8	7.7	9.7	11.6	13.6	15.5	17.4	19.4
38	6.0	8.0	10.0	11.9	13.9	15.9	17.9	19.9
39	6.1	8.2	10.2	12.3	14.3	16.3	18.4	20.4
40	6.3	8.4	10.5	12.6	14.7	16.8	18.8	20.9
42	6.6	8.8	11.0	13.2	15.4	17.6	19.8	22.0
44	6.9	9.2	11.5	13.8	16.1	18.4	20.7	23.0
46	7.2	9.6	12.0	14.5	16.9	19.3	21.7	24.1
48	7.5	10.1	12.6	15.1	17.6	20.1	22.6	25.1
50	7.9	10.5	13.1	15.7	18.3	20.9	23.6	26.2
52	8.2	10.9	13.6	16.3	19.1	21.8	24.5	27.2
54	8.5	11.3	14.1	17.0	19.8	22.6	25.4	28.3
56	8.8	11.7	14.7	17.6	20.5	23.5	26.4	29.3
58	9.1	12.1	15.2	18.2	21.3	24.3	27.3	30.4
60	9.4	12.6	15.7	18.8	22.0	25.1	28.3	31.4
64	10.1	13.4	16.8	20.1	23.5	26.8	30.2	33.5
68	10.7	14.2	17.8	21.4	24.9	28.5	32.0	35.6
72	11.3	15.1	18.8	22.6	26.4	30.2	33.9	37.7
76	11.9	15.9	19.9	23.9	27.9	31.8	35.8	39.8
80	12.6	16.8	20.9	25.1	29.3	33.5	37.7	41.9
84	13.2	17.6	22.0	26.4	30.8	35.2	39.6	44.0
88	13.8	18.4	23.0	27.6	32.3	36.9	41.5	46.1
92	14.5	19.3	24.1	28.9	33.7	38.5	43.3	48.2
96	15.1	20.1	25.1	30.2	35.2	40.2	45.2	50.3

NOTE. — The above table is based on one horse power per inch of width for each 500 feet per minute belt speed. The horse power for other pulley speeds in proportion.

Horse Power of Double Belts — (Concluded)
Pulleys, 100 R. P. M.; Belt Contact, $\frac{1}{2}$ Circumference

DIAMETER OF PULLEY	WIDTH OF DOUBLE BELT IN INCHES							
	12	14	16	18	20	22	24	26
18	11.3	13.2	15.1	17.0	18.9	20.7	22.6	24.5
19	11.9	13.9	15.9	17.9	19.9	21.9	23.9	25.9
20	12.6	14.7	16.8	18.8	20.9	23.0	25.1	27.2
21	13.2	15.4	17.6	19.8	22.0	24.2	26.4	28.6
22	13.8	16.1	18.4	20.7	23.0	25.3	27.6	29.9
23	14.4	16.8	19.3	21.7	24.1	26.5	28.9	31.3
24	15.1	17.6	20.1	22.6	25.1	27.6	30.2	32.7
25	15.7	18.3	20.9	23.5	26.2	28.7	31.3	34.0
26	16.3	19.1	21.8	24.5	27.2	29.9	32.7	35.4
27	17.0	19.8	22.6	25.4	28.3	31.1	33.9	36.8
28	17.6	20.5	23.5	26.4	29.3	32.2	35.2	38.1
29	18.2	21.3	24.3	27.3	30.4	33.4	36.4	39.5
30	18.8	22.0	25.1	28.3	31.4	34.6	37.7	40.8
31	19.5	22.7	25.9	29.2	32.4	35.7	38.9	42.2
32	20.1	23.4	26.8	30.1	33.5	36.8	40.2	43.6
33	20.7	24.2	27.6	31.1	34.6	38.0	41.5	44.9
34	21.4	24.9	28.5	32.0	35.6	39.2	42.7	46.3
35	22.0	25.7	29.3	33.0	36.6	40.3	44.0	47.6
36	22.6	26.4	30.1	33.9	37.7	41.5	45.2	49.0
37	23.2	27.1	31.0	34.9	38.7	42.6	46.5	50.4
38	23.9	27.9	31.8	35.8	39.8	43.8	47.8	51.7
39	24.5	28.6	32.7	36.7	40.8	44.9	49.0	53.1
40	25.1	29.3	33.5	37.7	41.9	46.1	50.3	54.5
42	26.4	30.8	35.2	39.6	44.0	48.4	52.8	57.2
44	27.6	32.2	36.8	41.4	46.1	50.7	55.3	59.9
46	28.9	33.7	38.5	43.4	48.2	53.0	57.8	62.6
48	30.1	35.2	40.2	45.2	50.3	55.3	60.3	65.3
50	31.4	36.7	41.9	47.1	52.4	57.6	62.8	68.1
52	32.7	38.2	43.5	49.0	54.4	59.9	65.3	70.8
54	33.9	39.6	45.2	50.9	56.5	62.2	67.9	73.5
56	35.2	41.0	46.9	52.8	58.6	64.5	70.4	76.2
58	36.4	42.5	48.6	54.6	60.7	66.8	72.9	78.9
60	37.7	44.0	50.2	56.5	62.8	69.1	75.4	81.7
64	40.2	46.9	53.6	60.3	67.0	73.7	80.4	87.1
68	42.7	49.8	57.0	64.1	71.2	78.3	85.4	92.6
72	45.2	52.8	60.3	67.9	75.4	82.9	90.5	98.0
76	47.7	55.7	63.7	71.6	79.6	87.5	95.5	103.5
80	50.3	58.6	67.0	75.4	83.8	92.1	100.5	108.9
84	52.8	61.6	70.4	79.2	87.9	96.7	105.5	114.4
88	55.3	64.5	73.7	82.9	92.2	101.4	110.6	119.8
92	57.8	67.4	77.1	86.7	96.3	106.0	115.6	125.2
96	60.3	70.4	80.4	90.5	100.5	110.6	120.6	130.7

NOTE. — The above table is based on one horse power per inch of width for each 500 feet per minute belt speed. The horse power for other pulley speeds in proportion.

Approximate Power required for Cotton Machinery

	Horse Power
Bale Breaker	3-5
Self-Feeding Openers	3
Combined Self-Feeding Opener and Single Beater Breaker Lap- per	9
40" Single Beater Intermediate or Finisher Lapper	5
Two-Beater Intermediate or Finisher Lapper	10-12
Waste Picker	3
Thread Extractor with Condenser	2
40" Revolving Flat Card, Production 750 lbs. per week	1
Sliver Lap Machine	$\frac{1}{2}$
Ribbon Lap Machine	1
Comber 6-head	$\frac{1}{2}$
Comber 8-head	$\frac{2}{3}$
Drawing Frames 4 to 5 deliveries per	1
Slubber Frames 40 to 45 spindles per	1
Intermediate Frames 55 to 60 spindles per	1
Roving Frames 70 to 85 spindles per	1
Jack or Fine Roving Frames 100 spindles per	1
Ring Spinning Frames:	
6,000 r. p. m. (Filling) 110 spindles per	1
7,000 r. p. m. (Filling) 100 spindles per	1
8,000 r. p. m. (Warp) 90 spindles per	1
8,500 r. p. m. (Warp) 80 spindles per	1
9,000 r. p. m. (Warp) 70 spindles per	1
10,000 r. p. m. (Warp) 60 spindles per	1
Mule, 720 spindles per	$7\frac{1}{2}$
Twisters 10 to 50 spindles per	1
Cone Winders 65 drums per	1
Spoolers 200 to 300 spindles per	1
Warpers	$\frac{1}{4}-\frac{1}{2}$
Ball Warpers	$\frac{1}{2}$
Slasher	2
Looms:	
32" and 36"	$\frac{1}{4}$
40" and 48"	$\frac{1}{3}$
80"	$\frac{1}{2}$
92" to 108"	$\frac{3}{4}-1$
Brusher	1
Brusher and Shearer	3
Cloth Folder	$\frac{1}{3}-\frac{1}{2}$

NOTE. — The above figures are only approximate, but they give a fair average of the power required to drive the various machines. The speed production and many other conditions affect the power consumed. For Friction of Belting and Shafting add from 18 to 22 per cent.

Common and Range of Production for Cotton Machinery

Compiled by Professor Stephen E. Smith

MACHINE	Range of Draft	Common Draft	Range of Production (10 Hours)	Common Production (10 Hours)	Per Cent Waste	Range of Speeds R. P. M.	Range of Sizes	Common Sizes	Per Cent Stops	
Bale opener . . .	-	-	4,000-10,000	5,000-7,000	-	-	-	-	10	
Breaker picker . .	-	2	1,500-3,000	2,000	2.5-3	9" Cal. Roll 4-8	10-20	13-16	5	
Intermediate picker	3-5	4	1,000-2,500	1,200-1,600	1.5-2	4-8	10-20	12-15	5	
Finisher picker . .	3-5	4	1,000-2,500	1,200-1,600	1.5-2	4-8	10-20	11-14	10	
Card . . .	85-130	90-110	30-200	85-150	4-12 (5-6)	27" Doffer 4-18	Grains 30-100	50-60	5	
Sliver lapper (20 ends)	13-21½	2-2¼	750-1,200	1,000	1	5" Press Roll 90-100	350-800	450-600	25	
Ribbon lapper (4 head)	3-5	4	750-1,200	1,000	1	90-100	350-800	450-600	25	
Comb (8 head) . .	40-80	60	80-150	100-128	Noil 8-30 Common 12-18	Nips 90-130	Grains 40-70	50-60	5	
Draw frame (6 ends)	4-8	6	75-300	100-150	Less than 1	Front Roll 275-375	40-70	50-60	20-25	
Slubber . . .	3-5	4	Production figures omitted on account of great variety as roving sizes change		Less than 1	Sp. Speed 600-800	Hank .25-1.0	Hank	15-20	
Intermediate . . .	4-6	5			Less than 1	800-1,000	1-2.5	1-2.5	12-15	
Fine . . .	5-7	6			Less than 1	1,000-1,200	2.5-6.0	2.5-6.0	4-12	
Jack . . .	6-8	7			Less than 1	1,200-1,500	6 Hank and up	6 Hank and up	7-9	
Ring spinning . .	6-20	8-12				4,000-10,000	4's-140	4's-140	10	
Mule . . .	6-20	8-12				4,000-10,000	15's-400	15's-400	12	

Conversion Table of Cotton Yarn Numbers

Metric Number	English Number	French Number	Austrian Number	Netherlands Number
1.	0.59	0.5	0.483	0.651
1.694	1.	0.8475	0.818	1.103
2.	1.18	1.	0.966	1.302
2.07	1.222	1.035	1.	1.3478
1.535	0.90629	.768	.74193	1.

Spinning Frame Production

To find 100 per cent Production per Spindle, in Pounds, from Speed of Front Roll:

$$\frac{\text{Circum. of Front Roll} \times \text{R. P. M.} \times \text{Minutes} \times \text{Hours}}{36 \text{ inches} \times 840 \times \text{No. of Yarn}} = \text{Lbs. per spindle.}$$

EXAMPLE:

$$\frac{3.1416 \times 90 \times 60 \times 54}{36 \times 840 \times 52} = .582 \text{ Lbs. per spindle.}$$

Roving Frame Production

To find 100 per cent Production of Roving Frames, in Hanks, from Speed of Front Roll:

$$\frac{\text{Circum. of Front Roll} \times \text{R. P. M.} \times \text{Minutes} \times \text{Hours}}{36 \text{ inches} \times 840} = \text{Hanks per spindle.}$$

EXAMPLE: Assume speed of front roll 80 r. p. m.
Assume Circum. of front roll 3.927 inches.

$$\frac{3.927 \times 80 \times 60 \times 54}{36 \times 840} = 33.66 \text{ Hanks per spindle.}$$

Roving Table

For numbering by the weight, in grains, of 12 yards; and showing twist per inch

Weight (Grains)	Hank Roving	Square Root	Twist Per Inch	Weight (Grains)	Hank Roving	Square Root	Twist Per Inch	Weight (Grains)	Hank Roving	Square Root	Twist Per Inch
400.00	.25	.500	.60	147.06	.68	.825	.99	81.97	1.22	1.105	1.33
384.61	.26	.510	.61	144.93	.69	.831	1.00	80.65	1.24	1.114	1.34
370.37	.27	.520	.62	142.86	.70	.837	1.00	79.37	1.26	1.122	1.35
357.14	.28	.529	.63	140.85	.71	.843	1.01	78.12	1.28	1.131	1.36
344.83	.29	.539	.65	138.89	.72	.849	1.02	76.92	1.30	1.140	1.37
333.33	.30	.548	.66	135.99	.73	.854	1.02	75.76	1.32	1.149	1.38
322.58	.31	.557	.67	135.14	.74	.860	1.03	74.63	1.34	1.158	1.39
312.50	.32	.566	.68	133.33	.75	.866	1.04	73.53	1.36	1.166	1.40
303.03	.33	.574	.69	131.58	.76	.872	1.05	72.46	1.38	1.175	1.41
294.12	.34	.583	.70	129.87	.77	.874	1.05	71.43	1.40	1.183	1.42
285.71	.35	.592	.71	128.21	.78	.883	1.06	70.42	1.42	1.192	1.43
277.78	.36	.600	.72	126.58	.79	.889	1.07	69.44	1.44	1.200	1.44
270.27	.37	.608	.73	125.00	.80	.894	1.07	68.49	1.46	1.208	1.45
263.16	.38	.616	.74	123.46	.81	.900	1.08	67.57	1.48	1.217	1.46
256.41	.39	.624	.75	121.95	.82	.906	1.09	66.67	1.50	1.225	1.47
250.00	.40	.632	.76	120.48	.83	.911	1.09	65.79	1.52	1.233	1.48
243.90	.41	.640	.77	119.05	.84	.917	1.10	64.94	1.54	1.241	1.49
238.10	.42	.648	.78	117.65	.85	.922	1.11	64.10	1.56	1.249	1.50
232.56	.43	.656	.79	116.28	.86	.927	1.11	63.29	1.58	1.257	1.51
227.27	.44	.663	.80	114.94	.87	.933	1.12	62.50	1.60	1.265	1.52
222.22	.45	.671	.80	113.64	.88	.938	1.13	61.73	1.62	1.273	1.53
217.39	.46	.678	.81	112.36	.89	.943	1.13	60.98	1.64	1.281	1.54
212.77	.47	.686	.82	111.11	.90	.949	1.14	60.24	1.66	1.288	1.55
208.33	.48	.693	.83	109.89	.91	.954	1.14	59.52	1.68	1.296	1.56
204.08	.49	.700	.84	108.70	.92	.959	1.15	58.82	1.70	1.304	1.56
200.00	.50	.707	.85	107.53	.93	.964	1.16	58.14	1.72	1.311	1.57
196.08	.51	.714	.86	106.38	.94	.970	1.16	57.47	1.74	1.319	1.58
192.31	.52	.721	.87	105.26	.95	.975	1.17	56.82	1.76	1.327	1.59
188.68	.53	.728	.87	104.17	.96	.980	1.18	56.18	1.78	1.334	1.60
185.19	.54	.735	.88	103.09	.97	.985	1.18	55.56	1.80	1.342	1.61
181.82	.55	.742	.89	102.04	.98	.990	1.19	54.95	1.82	1.349	1.62
178.57	.56	.748	.90	101.01	.99	.995	1.19	54.35	1.84	1.356	1.63
175.44	.57	.755	.91	100.00	1.00	1.000	1.20	53.76	1.86	1.364	1.64
172.41	.58	.762	.91	98.04	1.02	1.010	1.21	53.19	1.88	1.371	1.65
169.49	.59	.768	.92	96.15	1.04	1.020	1.22	52.63	1.90	1.378	1.65
166.67	.60	.775	.93	94.34	1.06	1.030	1.24	52.08	1.92	1.386	1.66
163.93	.61	.781	.94	92.59	1.08	1.039	1.25	51.55	1.94	1.393	1.67
161.29	.62	.787	.94	90.91	1.10	1.049	1.26	51.02	1.96	1.400	1.68
158.73	.63	.794	.95	89.29	1.12	1.058	1.27	50.51	1.98	1.407	1.69
156.25	.64	.800	.96	87.72	1.14	1.068	1.28	50.00	2.00	1.414	1.70
153.85	.65	.806	.97	86.21	1.16	1.077	1.29	49.50	2.02	1.421	1.71
151.52	.66	.812	.97	84.75	1.18	1.086	1.30	49.02	2.04	1.428	1.71
149.25	.67	.819	.98	83.33	1.20	1.095	1.31	48.54	2.06	1.435	1.72

Roving Table — (Concluded)

For numbering by the weight, in grains, of 12 yards; and showing twist per inch

Weight (Grains)	Hank Roving	Square Root	Twist Per Inch	Weight (Grain)	Hank Roving	Square Root	Twist Per Inch	Weight (Grains)	Hank Roving	Square Root	Twist Per Inch
48.08	2.08	1.442	1.73	34.01	2.94	1.715	2.06	14.29	7.00	2.646	3.17
47.62	2.10	1.449	1.74	33.78	2.96	1.721	2.07	14.08	7.10	2.665	3.20
47.17	2.12	1.456	1.75	33.56	2.98	1.726	2.07	13.89	7.20	2.683	3.22
46.73	2.14	1.463	1.76	33.33	3.00	1.732	2.08	13.70	7.30	2.702	3.24
46.30	2.16	1.470	1.76	32.26	3.10	1.761	2.11	13.51	7.40	2.720	3.26
45.87	2.18	1.476	1.77	31.25	3.20	1.789	2.15	13.33	7.50	2.739	3.29
45.45	2.20	1.483	1.78	30.30	3.30	1.817	2.18	13.16	7.60	2.757	3.31
45.05	2.22	1.490	1.79	29.41	3.40	1.844	2.21	12.99	7.70	2.775	3.33
44.64	2.24	1.497	1.80	28.57	3.50	1.871	2.24	12.82	7.80	2.793	3.35
44.25	2.26	1.503	1.80	27.78	3.60	1.897	2.28	12.66	7.90	2.811	3.37
43.86	2.28	1.510	1.81	27.03	3.70	1.924	2.31	12.50	8.00	2.828	3.39
43.48	2.30	1.517	1.82	26.32	3.80	1.949	2.34	12.35	8.10	2.846	3.42
43.10	2.32	1.523	1.83	25.64	3.90	1.975	2.37	12.20	8.20	2.864	3.44
42.74	2.34	1.530	1.84	25.00	4.00	2.000	2.40	12.05	8.30	2.881	3.46
42.37	2.36	1.536	1.84	24.39	4.10	2.025	2.43	11.90	8.40	2.898	3.48
42.02	2.38	1.543	1.85	23.81	4.20	2.049	2.46	11.76	8.50	2.915	3.50
41.67	2.40	1.549	1.86	23.26	4.30	2.074	2.49	11.63	8.60	2.933	3.52
41.32	2.42	1.556	1.87	22.73	4.40	2.098	2.52	11.49	8.70	2.950	3.54
40.98	2.44	1.562	1.87	22.22	4.50	2.121	2.55	11.36	8.80	2.966	3.56
40.65	2.45	1.568	1.88	21.74	4.60	2.145	2.57	11.24	8.90	2.983	3.58
40.32	2.48	1.575	1.89	21.28	4.70	2.168	2.60	11.11	9.00	3.000	3.60
40.00	2.50	1.581	1.90	20.83	4.80	2.191	2.63	10.99	9.10	3.017	3.62
39.68	2.52	1.587	1.90	20.41	4.90	2.214	2.66	10.87	9.20	3.033	3.64
39.37	2.54	1.594	1.91	20.00	5.00	2.236	2.68	10.75	9.30	3.050	3.66
39.06	2.56	1.600	1.92	19.61	5.10	2.258	2.71	10.64	9.40	3.066	3.68
38.76	2.58	1.606	1.93	19.23	5.20	2.280	2.74	10.53	9.50	3.082	3.70
38.46	2.60	1.612	1.93	18.87	5.30	2.302	2.76	10.42	9.60	3.098	3.72
38.17	2.62	1.619	1.94	18.52	5.40	2.324	2.76	10.31	9.70	3.114	3.74
37.88	2.64	1.625	1.95	18.18	5.50	2.345	2.81	10.20	9.80	3.130	3.76
37.59	2.66	1.631	1.96	17.86	5.60	2.366	2.84	10.10	9.90	3.146	3.78
37.31	2.68	1.637	1.96	17.54	5.70	2.387	2.86	10.00	10.00	3.162	3.79
37.04	2.70	1.643	1.97	17.24	5.80	2.408	2.89	9.09	11.00	3.317	3.98
36.76	2.72	1.649	1.98	16.95	5.90	2.429	2.91	8.33	12.00	3.464	4.16
36.50	2.74	1.655	1.99	16.67	6.00	2.449	2.94	7.69	13.00	3.606	4.33
36.23	2.76	1.661	1.99	16.39	6.10	2.470	2.96	7.14	14.00	3.742	4.49
35.97	2.78	1.667	2.00	16.13	6.20	2.490	2.99	6.67	15.00	3.873	4.65
35.71	2.80	1.673	2.01	15.87	6.30	2.510	3.01	6.25	16.00	4.000	4.80
35.46	2.82	1.679	2.01	15.62	6.40	2.530	3.04	5.88	17.00	4.123	4.95
35.21	2.84	1.685	2.02	15.38	6.50	2.550	3.06	5.56	18.00	4.243	5.09
34.97	2.86	1.691	2.03	15.15	6.60	2.569	3.08	5.26	19.00	4.359	5.23
34.72	2.88	1.697	2.04	14.93	6.70	2.588	3.11	5.00	20.00	4.472	5.37
34.48	2.90	1.703	2.04	14.71	6.80	2.608	3.13				
34.25	2.92	1.709	2.05	14.49	6.90	2.627	3.15				

Yarn Organizations

Courtesy W. A. Graham Clark

Yarn Number	Lap	Ounce Per Yard	CARD		DRAW- FRAME		SLUBBER			INTER- MEDIATE			FINE FRAME			JACK FRAME			SPIN- NING	
			Draft	Sliver Grains	Sliver Grains	Sliver Hank	Doublings	Draft	Hank	Doublings	Draft	Hank	Doublings	Draft	Hank	Doublings	Draft	Hank	Doublings	Draft
6	16	93	75	75	111	1	3.6	.40	2	5.	1.00	-	-	-	-	-	-	-	1	6.
8	16	-	75	75	111	1	4.5	.50	2	5.	1.25	-	-	-	-	-	-	-	1	6.4
10	14	94	65	65	128	1	3.9	.50	2	5.3	1.33	-	-	-	-	-	-	-	1	7.5
12	14	-	65	65	128	1	4.7	.60	2	5.3	1.60	-	-	-	-	-	-	-	1	7.5
-	14	-	65	65	128	1	3.9	.50	2	4.	1.00	2	5.	2.50	-	-	-	-	2	9.6
14	14	-	65	65	128	1	4.7	.60	2	5.3	1.60	-	-	-	-	-	-	-	1	8.8
-	14	-	65	65	128	1	3.9	.50	2	4.	1.00	2	5.	2.50	-	-	-	-	2	11.2
16	14	-	65	65	128	1	4.7	.60	2	6.	1.80	-	-	-	-	-	-	-	1	8.8
-	14	-	65	65	128	1	3.9	.50	2	4.	1.00	2	6.	3.00	-	-	-	-	2	10.6
18	14	-	65	65	128	1	3.9	.50	2	4.	1.00	2	5.	2.50	-	-	-	-	1	7.2
-	14	-	65	65	128	1	3.9	.50	2	4.	1.00	2	6.	3.00	-	-	-	-	2	12.0
20	13	95	60	65	128	1	3.9	.50	2	4.	1.00	2	5.	2.50	-	-	-	-	1	8.0
-	13	-	60	65	128	1	3.9	.50	2	5.3	1.33	2	6.	4.00	-	-	-	-	2	10.0
22	13	-	60	65	128	1	3.9	.50	2	4.	1.00	2	5.	2.50	-	-	-	-	1	8.8
-	13	-	60	65	128	1	3.9	.50	2	5.3	1.33	2	6.	4.00	-	-	-	-	2	11.0
24	13	-	60	65	128	1	3.9	.50	2	4.	1.00	2	5.	2.50	-	-	-	-	1	8.0
-	13	-	60	65	128	1	3.9	.50	2	5.3	1.33	2	6.	4.00	-	-	-	-	2	12.0
26	13	-	60	65	128	1	3.9	.50	2	4.	1.00	2	6.	3.00	-	-	-	-	1	8.7
-	13	-	60	65	128	1	4.7	.60	2	5.	1.50	2	6.	4.50	-	-	-	-	2	11.6
28	12	-	50	60	139	1	3.6	.50	2	5.3	1.33	2	5.3	3.50	-	-	-	-	1	8.0
-	12	-	50	60	139	1	4.7	.65	2	5.5	1.80	2	6.1	5.50	-	-	-	-	2	10.2
30	12	-	50	60	139	1	3.6	.50	2	5.3	1.33	2	5.3	3.50	-	-	-	-	1	8.6
-	12	-	50	60	139	1	4.7	.65	2	5.5	1.80	2	6.1	5.50	-	-	-	-	2	10.9
32	12	-	50	60	139	1	3.6	.50	2	5.3	1.33	2	6.	4.00	-	-	-	-	1	8.0
-	12	-	50	60	139	1	4.7	.65	2	5.5	1.80	2	6.1	5.50	-	-	-	-	2	11.6
34	12	-	50	60	139	1	3.6	.50	2	5.3	1.33	2	6.	4.00	-	-	-	-	1	8.5
-	12	-	50	60	139	1	4.7	.65	2	5.5	1.80	2	6.1	5.50	-	-	-	-	2	12.4
36	12	-	50	60	139	1	3.6	.50	2	5.3	1.33	2	6.	4.00	-	-	-	-	1	9.0
-	12	-	50	60	139	1	3.6	.50	2	4.	1.00	2	5.	2.50	2	5.2	6.5	-	2	11.1
38	12	-	50	60	139	1	3.6	.50	2	5.3	1.33	2	6.	4.00	-	-	-	-	1	9.5
-	12	-	50	60	139	1	3.6	.50	2	4.	1.00	2	5.	2.50	2	5.2	6.5	-	2	11.7
40	12	-	50	60	139	1	3.6	.50	2	4.	1.00	2	5.	2.50	2	6.4	8.0	-	2	10.0
50	12	117	45	60	139	1	3.6	.50	2	4.	1.00	2	6.	3.00	2	6.7	10.	-	2	10.0
60	12	-	45	60	139	1	4.3	.60	2	5.	1.50	2	5.3	4.00	2	6.0	12.	-	2	10.0
70	12	-	45	60	139	1	4.3	.60	2	5.	1.50	2	6.	4.50	2	6.2	14.	-	2	10.0
80	12	-	45	60	139	1	4.7	.65	2	5.5	1.80	2	5.6	5.00	2	6.4	16.	-	2	10.0
90	12	-	45	60	139	1	4.7	.65	2	5.5	1.80	2	6.1	5.50	2	6.5	18.	-	2	10.0
100	12	-	45	60	139	1	4.7	.65	2	5.5	1.80	2	6.4	5.75	2	7.0	20.	-	2	10.0
110	11	137	35	50	167	1	4.8	.80	2	5.5	2.25	2	6.	6.76	2	6.5	22.	-	2	10.0
120	11	-	35	50	167	1	4.8	.80	2	5.5	2.25	2	6.	6.75	2	7.1	24.	-	2	10.0

Square Root of the Numbers or Counts, from One to Two Hundred Hanks in the Pound, with the Twist per Inch for Different Kinds of Yarns

The heavy figures opposite No. 1 show the multipliers for the square root of all numbers throughout the tables.

Counts or Numbers	Square Root	Ordinary Warp Twists	Extra Mule Twist	Mule Twists	Weft Twist	Twist for Doubling	Hosiery Yarn
1	1.00	4.75	4.20	3.75	3.25	2.75	2.50
2	1.41	6.72	5.65	5.30	4.60	3.88	3.53
3	1.73	8.23	6.92	6.49	5.62	4.76	4.33
4	2.00	9.50	8.00	7.50	6.50	5.50	5.00
5	2.23	10.62	8.94	8.37	7.26	6.14	5.59
6	2.44	11.64	9.79	9.18	7.96	6.73	6.12
7	2.64	12.57	10.58	9.92	8.59	7.27	6.61
8	2.82	13.44	11.31	10.50	9.19	7.77	7.07
9	3.00	14.25	12.00	11.25	9.75	8.25	7.50
10	3.16	15.02	12.64	11.85	10.27	8.79	7.90
11	3.31	15.75	13.26	12.43	10.77	9.12	8.29
12	3.46	16.45	13.85	12.99	11.25	9.52	8.66
14	3.74	17.77	14.96	14.03	12.16	10.28	9.35
16	4.00	19.00	16.00	15.00	13.00	11.00	10.00
18	4.24	20.15	16.97	15.90	13.78	11.66	10.60
20	4.47	21.24	17.88	16.77	14.53	12.29	11.18
22	4.69	22.28	18.76	17.58	15.24	12.89	
24	4.89	23.27	19.59	18.37	15.92	13.47	
26	5.09	24.22	20.39	19.11	16.57	14.02	
28	5.29	25.13	21.16	19.84	17.19	14.55	
30	5.47	26.02	21.90	20.53	17.80	15.06	
35	5.91	28.10	23.66	22.18	19.22	16.27	
40	6.32	30.04	25.29	23.71	20.55	17.39	
45	6.70	31.86	26.83	25.15	21.80	18.44	
50	7.07	33.59	28.28	26.51	22.98	19.44	
55	7.41	35.23	29.66	27.81	24.10	20.39	
60	7.74	36.79	30.98	29.04	25.17	21.30	
65	8.06	38.30	32.24	30.23	26.20	22.17	
70	8.36	39.74	33.46	31.37	27.19	23.00	
75	8.66	41.14	34.64	32.47	28.14	23.81	
80	8.94	42.49	35.77	33.54	29.06	24.59	
85	9.21	43.79	36.87	34.57	29.96	25.35	
90	9.48	45.06	37.94	35.47	30.83	26.08	
95	9.74	46.30	38.98	36.55	31.67	26.80	
100	10.00	47.50	40.00	37.50	32.50	27.50	
110	10.48	49.82	41.95	39.33	34.08	28.84	
120	10.95	52.03	43.81	41.07	35.60	30.12	
130	11.40	54.16	45.60	42.75	37.05	31.35	
140	11.83	56.20	47.32	44.37	38.47	32.54	
150	12.24	58.04	48.98	45.92	39.80	33.68	
160	12.64	60.04	50.59	47.43	41.10	34.78	
170	13.03	61.89	52.15	48.89	42.37	35.85	
180	13.41	63.70	53.66	50.31	43.60	36.89	
190	13.78	65.46	55.13	51.69	44.79	37.90	
200	14.14	67.17	56.56	53.03	45.96	38.89	

Yarn Table

For numbering cotton yarn by the weight in grains of 120 yards or 1 skein

120 Yards Weight (Grains)	Number of Yarn	120 Yards Weight (Grains)	Number of Yarn	120 Yards Weight (Grains)	Number of Yarn	120 Yards Weight (Grains)	Number of Yarn	120 Yards Weight (Grains)	Number of Yarn
1.	1,000.	.3	81.30	.6	56.82	.9	43.67	.2	35.46
2.	500.	.4	80.65	.7	56.50	23.	43.48	.3	35.34
3.	333.3	.5	80.00	.8	56.18	.1	43.29	.4	35.21
4.	250.0	.6	79.37	.9	55.87	.2	43.10	.5	35.09
5.	200.0	.7	78.74	18.	55.56	.3	42.92	.6	34.97
5.5	181.8	.8	78.12	.1	55.25	.4	42.74	.7	34.84
6.	166.7	.9	77.52	.2	54.95	.5	42.55	.8	34.72
6.5	153.8	13.	76.92	.3	54.64	.6	42.37	.9	34.60
7.	142.9	.1	76.34	.4	54.35	.7	42.19	29.	34.48
7.5	133.3	.2	75.76	.5	54.05	.8	42.02	.1	34.36
8.	125.0	.3	75.19	.6	53.76	.9	41.84	.2	34.25
.1	123.5	.4	74.63	.7	53.48	24.	41.67	.3	34.13
.2	122.0	.5	74.07	.8	53.19	.1	41.49	.4	34.01
.3	120.5	.6	73.53	.9	52.91	.2	41.32	.5	33.90
.4	119.0	.7	72.99	19.	52.63	.3	41.15	.6	33.78
.5	117.6	.8	72.46	.1	52.36	.4	40.98	.7	33.67
.6	116.3	.9	71.94	.2	52.08	.5	40.82	.8	33.56
.7	114.9	14.	71.43	.3	51.81	.6	40.65	.9	33.44
.8	113.6	.1	70.92	.4	51.55	.7	40.49	30.	33.33
.9	112.4	.2	70.42	.5	51.28	.8	40.32	.1	33.22
9.	111.1	.3	69.93	.6	51.02	.9	40.16	.2	33.11
.1	109.9	.4	69.44	.7	50.76	25.	40.00	.3	33.00
.2	108.7	.5	68.97	.8	50.51	.1	39.84	.4	32.89
.3	107.5	.6	68.49	.9	50.25	.2	39.68	.5	32.79
.4	106.4	.7	68.03	20.	50.00	.3	39.53	.6	32.68
.5	105.3	.8	67.57	.1	49.75	.4	39.37	.7	32.57
.6	104.2	.9	67.11	.2	49.50	.5	39.22	.8	32.47
.7	103.1	15.	66.67	.3	49.26	.6	39.06	.9	32.36
.8	102.0	.1	66.23	.4	49.02	.7	38.91	31.	32.26
.9	101.0	.2	65.79	.5	48.78	.8	38.76	.1	32.16
10.	100.0	.3	65.36	.6	48.54	.9	38.61	.2	32.05
.1	99.01	.4	64.94	.7	48.31	26.	38.46	.3	31.95
.2	98.04	.5	64.52	.8	48.08	.1	38.31	.4	31.85
.3	97.09	.6	64.10	.9	47.85	.2	38.17	.5	31.75
.4	96.15	.7	63.69	21.	47.62	.3	38.02	.6	31.65
.5	95.24	.8	63.29	.1	47.33	.4	37.88	.7	31.55
.6	94.34	.9	62.89	.2	47.17	.5	37.74	.8	31.45
.7	93.46	16.	62.50	.3	46.95	.6	37.59	.9	31.35
.8	92.59	.1	62.11	.4	46.73	.7	37.45	32.	31.25
.9	91.74	.2	61.73	.5	46.51	.8	37.31	.1	31.15
11.	90.91	.3	61.35	.6	46.30	.9	37.17	.2	31.06
.1	90.09	.4	60.98	.7	46.08	27.	37.04	.3	30.96
.2	89.29	.5	60.61	.8	45.87	.1	36.90	.4	30.86
.3	88.50	.6	60.24	.9	45.66	.2	36.77	.5	30.77
.4	87.72	.7	59.88	22.	45.45	.3	36.63	.6	30.67
.5	86.96	.8	59.52	.1	45.25	.4	36.50	.7	30.58
.6	86.21	.9	59.17	.2	45.05	.5	36.36	.8	30.49
.7	85.47	17.	58.82	.3	44.84	.6	36.23	.9	30.40
.8	84.75	.1	58.48	.4	44.64	.7	36.10	33.	30.30
.9	84.03	.2	58.14	.5	44.44	.8	35.97	.1	30.21
12.	83.33	.3	57.80	.6	44.25	.9	35.84	.2	30.12
.1	82.64	.4	57.47	.7	44.05	28.	35.71	.3	30.03
.2	81.97	.5	57.14	.8	43.86	.1	35.59	.4	20.04

Yarn Table — (Continued)

For numbering cotton yarn by the weight in grains of 120 yards or 1 skein

120 Yards Weight (Grains)	Number of Yarn	120 Yards Weight (Grains)	Number of Yarn	120 Yards Weight (Grains)	Number of Yarn	120 Yards Weight (Grains)	Number of Yarn	120 Yards Weight (Grains)	Number of Yarn
.5	29.85	.8	25.77	.1	22.68	.4	20.24	.7	18.28
.6	29.76	.9	25.71	.2	22.62	.5	20.20	.8	18.25
.7	29.67	39.	25.64	.3	22.57	.6	20.16	.9	18.21
.8	29.59	.1	25.58	.4	22.52	.7	20.12	55.	18.18
.9	29.50	.2	25.51	.5	22.47	.8	20.08	.1	18.15
34.	29.41	.3	25.45	.6	22.42	.9	20.04	.2	18.12
.1	29.33	.4	25.38	.7	22.37	50.	20.00	.3	18.08
.2	29.24	.5	25.32	.8	22.32	.1	19.96	.4	18.05
.3	29.15	.6	25.25	.9	22.27	.2	19.92	.5	18.02
.4	29.07	.7	25.19	45.	22.22	.3	19.88	.6	17.99
.5	28.99	.8	25.13	.1	22.17	.4	19.84	.7	17.95
.6	28.90	.9	25.06	.2	22.12	.5	19.80	.8	17.92
.7	28.82	40.	25.00	.3	22.08	.6	19.76	.9	17.89
.8	28.74	.1	24.94	.4	22.03	.7	19.72	56.	17.86
.9	28.65	.2	24.88	.5	21.98	.8	19.69	.1	17.83
35.	28.57	.3	24.81	.6	21.93	.9	19.65	.2	17.79
.1	28.49	.4	24.75	.7	21.88	51.	19.61	.3	17.76
.2	28.41	.5	24.69	.8	21.83	.1	19.57	.4	17.73
.3	28.33	.6	24.63	.9	21.79	.2	19.53	.5	17.70
.4	28.25	.7	24.57	46.	21.74	.3	19.49	.6	17.67
.5	28.17	.8	24.51	.1	21.69	.4	19.46	.7	17.64
.6	28.09	.9	24.45	.2	21.65	.5	19.42	.8	17.61
.7	28.01	41.	24.39	.3	21.60	.6	19.38	.9	17.57
.8	27.93	.1	24.33	.4	21.55	.7	19.34	57.	17.54
.9	27.86	.2	24.27	.5	21.51	.8	19.31	.1	17.51
36.	27.78	.3	24.21	.6	21.46	.9	19.27	.2	17.48
.1	27.70	.4	24.15	.7	21.41	52.	19.23	.3	17.45
.2	27.62	.5	24.10	.8	21.37	.1	19.19	.4	17.42
.3	27.55	.6	24.04	.9	21.32	.2	19.16	.5	17.39
.4	27.47	.7	23.98	47.	21.28	.3	19.12	.6	17.36
.5	27.40	.8	23.92	.1	21.23	.4	19.08	.7	17.33
.6	27.32	.9	23.87	.2	21.19	.5	19.05	.8	17.30
.7	27.25	42.	23.81	.3	21.14	.6	19.01	.9	17.27
.8	27.17	.1	23.75	.4	21.10	.7	18.98	58.	17.24
.9	27.10	.2	23.70	.5	21.05	.8	18.94	.1	17.21
37.	27.03	.3	23.64	.6	21.01	.9	18.90	.2	17.18
.1	26.95	.4	23.58	.7	20.96	53.	18.87	.3	17.15
.2	26.88	.5	23.53	.8	20.92	.1	18.83	.4	17.12
.3	26.81	.6	23.47	.9	20.88	.2	18.80	.5	17.09
.4	26.74	.7	23.42	48.	20.83	.3	18.76	.6	17.06
.5	26.67	.8	23.36	.1	20.79	.4	18.73	.7	17.04
.6	26.60	.9	23.31	.2	20.75	.5	18.69	.8	17.01
.7	26.53	43.	23.26	.3	20.70	.6	18.66	.9	16.98
.8	26.46	.1	23.20	.4	20.66	.7	18.62	59.	16.95
.9	26.39	.2	23.15	.5	20.62	.8	18.59	.1	16.92
38.	26.32	.3	23.09	.6	20.57	.9	18.55	.2	16.89
.1	26.25	.4	23.04	.7	20.53	54.	18.52	.3	16.86
.2	26.18	.5	22.99	.8	20.49	.1	18.48	.4	16.84
.3	26.11	.6	22.94	.9	20.45	.2	18.45	.5	16.81
.4	26.04	.7	22.88	49.	20.41	.3	18.42	.6	16.78
.5	25.97	.8	22.83	.1	20.37	.4	18.38	.7	16.75
.6	25.91	.9	22.78	.2	20.33	.5	18.35	.8	16.72
.7	25.84	44.	22.73	.3	20.28	.6	18.32	.9	16.69

Yarn Table — (Continued)

For numbering cotton yarn by the weight in grains of 120 yards or 1 skein

120 Yards Weight (Grains)	Number of Yarn	120 Yards Weight (Grains)	Number of Yarn	120 Yards Weight (Grains)	Number of Yarn	120 Yards Weight (Grains)	Number of Yarn	120 Yards Weight (Grains)	Number of Yarn
60.	16.67	.3	15.31	.6	14.16	.9	13.18	.2	12.32
.1	16.64	.4	15.29	.7	14.14	76.	13.16	.3	12.30
.2	16.61	.5	15.27	.8	14.12	.1	13.14	.4	12.29
.3	16.58	.6	15.24	.9	14.10	.2	13.12	.5	12.27
.4	16.56	.7	15.22	71.	14.08	.3	13.11	.6	12.25
.5	16.53	.8	15.20	.1	14.06	.4	13.09	.7	12.24
.6	16.50	.9	15.17	.2	14.04	.5	13.07	.8	12.22
.7	16.47	66.	15.15	.3	14.03	.6	13.05	.9	12.21
.8	16.45	.1	15.13	.4	14.01	.7	13.04	82.	12.20
.9	16.42	.2	15.11	.5	13.99	.8	13.02	.1	12.18
61.	16.39	.3	15.08	.6	13.97	.9	13.00	.2	12.17
.1	16.37	.4	15.06	.7	13.95	77.	12.99	.3	12.15
.2	16.34	.5	15.04	.8	13.93	.1	12.97	.4	12.14
.3	16.31	.6	15.02	.9	13.91	.2	12.95	.5	12.12
.4	16.29	.7	14.99	72.	13.89	.3	12.94	.6	12.11
.5	16.26	.8	14.97	.1	13.87	.4	12.92	.7	12.09
.6	16.23	.9	14.95	.2	13.85	.5	12.90	.8	12.08
.7	16.21	67.	14.93	.3	13.83	.6	12.89	.9	12.06
.8	16.19	.1	14.90	.4	13.81	.7	12.87	83.	12.05
.9	16.16	.2	14.88	.5	13.79	.8	12.85	.1	12.03
62.	16.13	.3	14.86	.6	13.77	.9	12.84	.2	12.02
.1	16.10	.4	14.84	.7	13.76	78.	12.82	.3	12.00
.2	16.08	.5	14.81	.8	13.74	.1	12.80	.4	11.99
.3	16.05	.6	14.79	.9	13.72	.2	12.79	.5	11.98
.4	16.03	.7	14.77	73.	13.70	.3	12.77	.6	11.96
.5	16.00	.8	14.75	.1	13.68	.4	12.76	.7	11.95
.6	15.97	.9	14.73	.2	13.66	.5	12.74	.8	11.93
.7	15.95	68.	14.71	.3	13.64	.6	12.72	.9	11.92
.8	15.92	.1	14.68	.4	13.62	.7	12.71	84.	11.90
.9	15.90	.2	14.66	.5	13.61	.8	12.69	.1	11.89
63.	15.87	.3	14.64	.6	13.59	.9	12.67	.2	11.88
.1	15.85	.4	14.62	.7	13.57	79.	12.66	.3	11.86
.2	15.83	.5	14.60	.8	13.55	.1	12.64	.4	11.85
.3	15.80	.6	14.58	.9	13.53	.2	12.63	.5	11.83
.4	15.77	.7	14.56	74.	13.51	.3	12.61	.6	11.82
.5	15.75	.8	14.53	.1	13.50	.4	12.59	.7	11.81
.6	15.72	.9	14.51	.2	13.48	.5	12.58	.8	11.79
.7	15.70	69.	14.49	.3	13.46	.6	12.56	.9	11.78
.8	15.67	.1	14.47	.4	13.44	.7	12.55	85.	11.76
.9	15.65	.2	14.45	.5	13.42	.8	12.53	.1	11.75
64.	15.62	.3	14.43	.6	13.40	.9	12.52	.2	11.74
.1	15.60	.4	14.41	.7	13.39	80.	12.50	.3	11.72
.2	15.58	.5	14.39	.8	13.37	.1	12.48	.4	11.71
.3	15.55	.6	14.37	.9	13.35	.2	12.47	.5	11.70
.4	15.53	.7	14.35	75.	13.33	.3	12.45	.6	11.68
.5	15.50	.8	14.33	.1	13.32	.4	12.44	.7	11.67
.6	15.48	.9	14.31	.2	13.30	.5	12.42	.8	11.66
.7	15.46	70.	14.29	.3	13.28	.6	12.41	.9	11.64
.8	15.43	.1	14.27	.4	13.26	.7	12.39	86.	11.63
.9	15.41	.2	14.25	.5	13.25	.8	12.38	.1	11.61
65.	15.38	.3	14.22	.6	13.23	.9	12.36	.2	11.60
.1	15.36	.4	14.20	.7	13.21	81.	12.35	.3	11.59
.2	15.34	.5	14.18	.8	13.19	.1	12.33	.4	11.57

Yarn Table — (Continued)

For numbering cotton yarn by the weight in grains of 120 yards or 1 skein

120 Yards Weight (Grains)	Number of Yarn	120 Yards Weight (Grains)	Number of Yarn	120 Yards Weight (Grains)	Number of Yarn	120 Yards Weight (Grains)	Number of Yarn	120 Yards Weight (Grains)	Number of Yarn
.5	11.56	.8	10.89	.1	10.30	.4	9.77	.7	9.29
.6	11.55	.9	10.88	.2	10.29	.5	9.76	.8	9.28
.7	11.53	92.	10.87	.3	10.28	.6	9.75	.9	9.27
.8	11.52	.1	10.86	.4	10.27	.7	9.74	108.	9.26
.9	11.51	.2	10.85	.5	10.26	.8	9.73	.1	9.25
87.	11.49	.3	10.83	.6	10.25	.9	9.72	.2	9.24
.1	11.48	.4	10.82	.7	10.24	103.	9.71	.3	9.23
.2	11.47	.5	10.81	.8	10.22	.1	9.70	.4	9.23
.3	11.45	.6	10.80	.9	10.21	.2	9.69	.5	9.22
.4	11.44	.7	10.79	98.	10.20	.3	9.68	.6	9.21
.5	11.43	.8	10.78	.1	10.19	.4	9.67	.7	9.20
.6	11.42	.9	10.76	.2	10.18	.5	9.66	.8	9.19
.7	11.40	93.	10.75	.3	10.17	.6	9.65	.9	9.18
.8	11.39	.1	10.74	.4	10.16	.7	9.64	109.	9.17
.9	11.38	.2	10.73	.5	10.15	.8	9.63	.2	9.16
88.	11.36	.3	10.72	.6	10.14	.9	9.62	.4	9.14
.1	11.35	.4	10.71	.7	10.13	104.	9.62	.6	9.12
.2	11.34	.5	10.70	.8	10.12	.1	9.61	.8	9.11
.3	11.33	.6	10.68	.9	10.11	.2	9.60	110.	9.09
.4	11.31	.7	10.67	99.	10.10	.3	9.59	.2	9.07
.5	11.30	.8	10.66	.1	10.09	.4	9.58	.4	9.06
.6	11.29	.9	10.65	.2	10.08	.5	9.57	.6	9.04
.7	11.27	94.	10.64	.3	10.07	.6	9.56	.8	9.03
.8	11.26	.1	10.63	.4	10.06	.7	9.55	111.	9.01
.9	11.25	.2	10.62	.5	10.05	.8	9.54	.2	8.99
89.	11.24	.3	10.60	.6	10.04	.9	9.53	.4	8.98
.1	11.22	.4	10.59	.7	10.03	105.	9.52	.6	8.96
.2	11.21	.5	10.58	.8	10.02	.1	9.51	.8	8.94
.3	11.20	.6	10.57	.9	10.01	.2	9.51	112.	8.93
.4	11.19	.7	10.56	100.	10.00	.3	9.50	.2	8.91
.5	11.17	.8	10.55	.1	9.99	.4	9.49	.4	8.90
.6	11.16	.9	10.54	.2	9.98	.5	9.48	.6	8.88
.7	11.15	95.	10.53	.3	9.97	.6	9.47	.8	8.87
.8	11.14	.1	10.52	.4	9.96	.7	9.46	113.	8.85
.9	11.12	.2	10.50	.5	9.95	.8	9.45	.2	8.83
90.	11.11	.3	10.49	.6	9.94	.9	9.44	.4	8.82
.1	11.10	.4	10.48	.7	9.93	106.	9.43	.6	8.80
.2	11.09	.5	10.47	.8	9.92	.1	9.43	.8	8.79
.3	11.07	.6	10.46	.9	9.91	.2	9.42	114.	8.77
.4	11.06	.7	10.45	101.	9.90	.3	9.41	.2	8.76
.5	11.05	.8	10.44	.1	9.89	.4	9.40	.4	8.74
.6	11.04	.9	10.43	.2	9.88	.5	9.39	.6	8.73
.7	11.03	96.	10.42	.3	9.87	.6	9.38	.8	8.71
.8	11.01	.1	10.41	.4	9.86	.7	9.37	115.	8.70
.9	11.00	.2	10.40	.5	9.85	.8	9.36	.2	8.68
91.	10.99	.3	10.38	.6	9.84	.9	9.35	.4	8.67
.1	10.98	.4	10.37	.7	9.83	107.	9.35	.6	8.65
.2	10.96	.5	10.36	.8	9.82	.1	9.34	.8	8.64
.3	10.95	.6	10.35	.9	9.81	.2	9.33	116.	8.62
.4	10.94	.7	10.34	102.	9.80	.3	9.32	.2	8.61
.5	10.93	.8	10.33	.1	9.79	.4	9.31	.4	8.59
.6	10.92	.9	10.32	.2	9.78	.5	9.30	.6	8.58
.7	10.91	97.	10.31	.3	9.78	.6	9.29	.8	8.56

Yarn Table — (Continued)

For numbering cotton yarn by the weight in grains of 120 yards or 1 skein

120 Yards Weight (Grains)	Number of Yarn	120 Yards Weight (Grains)	Number of Yarn	120 Yards Weight (Grains)	Number of Yarn	120 Yards Weight (Grains)	Number of Yarn	120 Yards Weight (Grains)	Number of Yarn
117.	8.55	.5	7.33	163.	6.13	209.	4.78	274.	3.65
.2	8.53	137.	7.30	.5	6.12	210.	4.76	276.	3.62
.4	8.52	.5	7.27	164.	6.10	211.	4.74	278.	3.60
.6	8.50	138.	7.25	.5	6.08	212.	4.72	280.	3.57
.8	8.49	.5	7.22	165.	6.06	213.	4.69	282.	3.55
118.	8.47	139.	7.19	.5	6.04	214.	4.67	284.	3.52
.2	8.46	.5	7.17	166.	6.02	215.	4.65	286.	3.50
.4	8.45	140.	7.14	.5	6.01	216.	4.63	288.	3.47
.6	8.43	.5	7.12	167.	5.99	217.	4.61	290.	3.45
.8	8.42	141.	7.09	.5	5.97	218.	4.59	292.	3.42
119.	8.40	.5	7.07	168.	5.95	219.	4.57	294.	3.40
.2	8.39	142.	7.04	.5	5.93	220.	4.55	296.	3.33
.4	8.38	.5	7.02	169.	5.92	221.	4.52	298.	3.36
.6	8.36	143.	6.99	.5	5.90	222.	4.50	300.	3.33
.8	8.35	.5	6.97	170.	5.88	223.	4.48	302.	3.31
120.	8.33	144.	6.94	171.	5.85	224.	4.46	304.	3.29
.2	8.32	.5	6.92	172.	5.81	225.	4.44	306.	3.27
.4	8.31	145.	6.90	173.	5.78	226.	4.42	308.	3.25
.6	8.29	.5	6.87	174.	5.75	227.	4.41	310.	3.23
.8	8.28	146.	6.85	175.	5.71	228.	4.39	312.	3.21
121.	8.26	.5	6.83	176.	5.68	229.	4.37	314.	3.18
.4	8.24	147.	6.80	177.	5.65	230.	4.35	316.	3.17
.6	8.22	.5	6.78	178.	5.62	231.	4.33	318.	3.14
.8	8.21	148.	6.76	179.	5.59	232.	4.31	320.	3.12
122.	8.20	.5	6.73	180.	5.56	233.	4.29	322.	3.11
.5	8.16	149.	6.71	181.	5.52	234.	4.27	324.	3.09
123.	8.13	.5	6.69	182.	5.49	235.	4.26	326.	3.07
.5	8.10	150.	6.67	183.	5.46	236.	4.24	328.	3.05
124.	8.06	.5	6.64	184.	5.43	237.	4.22	330.	3.03
.5	8.03	151.	6.62	185.	5.41	238.	4.20	332.	3.01
125.	8.00	.5	6.60	186.	5.38	239.	4.18	334.	2.99
.5	7.97	152.	6.58	187.	5.35	240.	4.17	336.	2.98
126.	7.94	.5	6.56	188.	5.32	241.	4.15	338.	2.96
.5	7.91	153.	6.54	189.	5.29	242.	4.13	340.	2.94
127.	7.87	.5	6.51	190.	5.26	243.	4.12	342.	2.92
.5	7.84	154.	6.49	191.	5.24	244.	4.10	344.	2.91
128.	7.81	.5	6.47	192.	5.21	245.	4.08	346.	2.89
.5	7.78	155.	6.45	193.	5.18	246.	4.07	348.	2.87
129.	7.75	.5	6.43	194.	5.15	247.	4.05	350.	2.86
.5	7.72	156.	6.41	195.	5.13	248.	4.03	352.	2.84
130.	7.69	.5	6.39	196.	5.10	249.	4.02	354.	2.82
.5	7.66	157.	6.36	197.	5.08	250.	4.00	356.	2.81
131.	7.63	.5	6.35	198.	5.05	252.	3.97	358.	2.79
.5	7.60	158.	6.33	199.	5.03	254.	3.94	360.	2.78
132.	7.58	.5	6.31	200.	5.00	256.	3.91	362.	2.76
.5	7.55	159.	6.29	201.	4.98	258.	3.88	364.	2.75
133.	7.52	.5	6.27	202.	4.95	260.	3.85	366.	2.73
.5	7.49	160.	6.25	203.	4.93	262.	3.82	368.	2.72
134.	7.46	.5	6.23	204.	4.90	264.	3.79	370.	2.70
.5	7.43	161.	6.21	205.	4.88	266.	3.76	372.	2.69
135.	7.41	.5	6.19	206.	4.85	268.	3.73	374.	2.67
.5	7.38	162.	6.17	207.	4.83	270.	3.70	376.	2.66
136.	7.35	.5	6.15	208.	4.81	272.	3.68	378.	2.65

Yarn Table — (Concluded)

For numbering cotton yarn by the weight in grains of 120 yards or 1 skein

120 Yards Weight (Grains)	Number of Yarn	120 Yards Weight (Grains)	Number of Yarn	120 Yards Weight (Grains)	Number of Yarn	120 Yards Weight (Grains)	Number of Yarn	120 Yards Weight (Grains)	Number of Yarn
380.	2.63	450.	2.22	525.	1.90	600.	1.67	750.	1.33
382.	2.62	455.	2.20	530.	1.89	610.	1.64	760.	1.32
385.	2.60	460.	2.17	535.	1.87	620.	1.61	770.	1.30
390.	2.56	465.	2.15	540.	1.85	630.	1.59	780.	1.28
395.	2.53	470.	2.13	545.	1.83	640.	1.56	790.	1.27
400.	2.50	475.	2.11	550.	1.82	650.	1.54	800.	1.25
405.	2.47	480.	2.08	555.	1.80	660.	1.52	820.	1.22
410.	2.44	485.	2.06	560.	1.79	670.	1.49	840.	1.19
415.	2.41	490.	2.04	565.	1.77	680.	1.47	860.	1.16
420.	2.38	495.	2.02	570.	1.75	690.	1.45	880.	1.14
425.	2.35	500.	2.00	575.	1.74	700.	1.43	900.	1.11
430.	2.33	505.	1.98	580.	1.72	710.	1.41	925.	1.08
435.	2.30	510.	1.96	585.	1.71	720.	1.39	950.	1.05
440.	2.27	515.	1.94	590.	1.69	730.	1.37	975.	1.03
445.	2.25	520.	1.92	595.	1.68	740.	1.35	1,000.	1.00

Yarn Number

To find the yarn number or count:

$$\frac{\text{Number of yards in Sample} \times \text{Grains in a Pound}}{\text{Weight of sample in grains} \times \text{standard}} = \text{Yarn Number}$$

Or for cotton yarn using a 120 yard skein:

$$\frac{120 \times 7,000}{\text{Weight of sample} \times 840} = \frac{1,000}{\text{Weight of sample in grains}} = \text{Yarn Number}$$

Conversion Table Cotton Count to Denier

Courtesy of the United States Testing Company

Cotton Count	Yards per Pound	Equivalent Denier	Cotton Count	Yards per Pound	Equivalent Denier	Cotton Count	Yards per Pound	Equivalent Denier
1	840	5,314.915	43	36,120	123.603	200	168,000	26.575
2	1,680	2,657.457	44	36,960	120.793	210	176,400	25.309
3	2,520	1,771.638	45	37,800	118.109	220	184,800	24.159
4	3,360	1,328.729	46	38,640	115.542	230	193,200	23.108
5	4,200	1,062.983	47	39,480	113.083	240	201,600	22.146
6	5,040	885.819	48	40,320	110.727	250	210,000	21.260
7	5,880	759.274	49	41,160	108.468	260	218,400	20.442
8	6,720	664.364	50	42,000	106.298	270	226,800	19.685
9	7,560	590.546	52	43,680	102.210	280	235,200	18.982
10	8,400	531.491	54	45,360	98.425	290	243,600	18.327
11	9,240	483.172	56	47,040	94.909	300	252,000	17.716
12	10,080	442.910	58	48,720	91.637	310	260,400	17.145
13	10,920	408.839	60	50,400	88.582	320	268,800	16.609
14	11,760	379.637	62	52,080	85.725	330	277,200	16.106
15	12,600	354.328	64	53,760	83.045	340	285,600	15.632
16	13,440	332.182	66	55,440	80.529	350	294,000	15.186
17	14,280	312.642	68	57,120	78.161	360	302,400	14.764
18	15,120	295.273	70	58,800	75.927	370	310,800	14.365
19	15,960	279.732	72	60,480	73.818	380	319,200	13.987
20	16,800	265.746	74	62,160	71.823	390	327,600	13.628
21	17,640	253.091	76	63,840	69.933	400	336,000	13.287
22	18,480	241.586	78	65,520	68.140	410	344,400	12.963
23	19,320	231.083	80	67,200	66.436	420	352,800	12.655
24	20,160	221.455	82	68,880	64.816	430	361,200	12.360
25	21,000	212.597	84	70,560	63.273	440	369,600	12.079
26	21,840	204.420	86	72,240	61.801	450	378,000	11.811
27	22,680	196.849	88	73,920	60.396	460	386,400	11.554
28	23,520	189.818	90	75,600	59.055	470	394,800	11.308
29	24,360	183.273	92	77,280	57.771	480	403,200	11.073
30	25,200	177.164	94	78,960	56.542	490	411,600	10.847
31	26,040	171.449	96	80,640	55.364	500	420,000	10.630
32	26,880	166.091	98	82,320	54.234	510	428,400	10.421
33	27,720	161.057	100	84,000	53.149	520	436,800	10.221
34	28,560	156.321	110	92,400	48.317	530	445,200	10.028
35	29,400	151.855	120	100,800	44.291	540	453,600	9.843
36	30,240	147.637	130	109,200	40.884	550	462,000	9.664
37	31,080	143.646	140	117,600	37.964	560	470,400	9.491
38	31,920	139.866	150	126,000	35.433	570	478,800	9.324
39	32,760	136.280	160	134,400	33.218	580	487,200	9.164
40	33,600	132.873	170	142,800	31.264	590	495,600	9.008
41	34,440	129.632	180	151,200	29.527	600	504,000	8.858
42	35,280	126.546	190	159,600	27.973			

Comparison of English and French Counts of Cotton Yarn

English Counts	French Counts	English Counts	French Counts	English Counts	French Counts	English Counts	French Counts	English Counts	French Counts
1	0.847	17	14.40	46	38.96	78	66.07	150	127.05
2	1.693	18	15.25	48	40.66	80	67.76	160	135.52
3	2.540	19	16.09	50	42.35	82	69.45	170	143.99
4	3.388	20	16.94	52	44.04	84	71.15	180	152.46
5	4.235	22	18.63	54	45.74	86	72.84	190	160.93
6	5.082	24	20.33	56	47.43	88	74.54	200	169.40
7	5.929	26	22.02	58	49.13	90	76.23	210	177.87
8	6.776	28	23.72	60	50.82	92	77.92	220	186.34
9	7.623	30	25.41	62	52.51	94	79.62	230	194.81
10	8.470	32	27.10	64	54.21	96	81.31	240	203.28
11	9.313	34	28.80	66	55.90	98	83.01	250	211.75
12	10.16	36	30.49	68	57.00	100	84.70	260	220.22
13	11.01	38	32.19	70	59.29	110	93.17	270	228.69
14	11.86	40	33.88	72	60.98	120	101.64	280	237.16
15	12.70	42	35.57	74	62.68	130	110.11	290	245.63
16	13.55	44	37.27	76	64.37	140	118.58	300	254.10

Comparison of French and English Counts of Cotton Yarn

French Counts	English Counts	French Counts	English Counts	French Counts	English Counts	French Counts	English Counts	French Counts	English Counts
1	1.18	17	20.1	46	54.3	78	92.—	150	177.—
2	2.36	18	21.2	48	56.6	80	94.4	160	189.—
3	3.54	19	22.4	50	59.—	82	96.8	170	201.—
4	4.72	20	23.6	52	61.4	84	99.2	180	212.—
5	5.90	22	26.—	54	63.7	86	101.5	190	224.—
6	7.08	24	28.3	56	66.1	88	103.8	200	236.—
7	8.26	26	30.7	58	68.4	90	106.2	210	247.8
8	9.44	28	33.—	60	70.8	92	108.6	220	260.—
9	10.6	30	35.4	62	73.1	94	110.9	230	271.4
10	11.8	32	37.8	64	75.5	96	113.2	240	283.—
11	13.—	34	40.1	66	77.9	98	115.6	250	295.—
12	14.2	36	42.5	68	80.2	100	118.—	260	307.—
13	15.3	38	44.8	70	82.6	110	130.—	270	318.6
14	16.5	40	47.2	72	84.9	120	141.6	280	330.—
15	17.7	42	49.6	74	87.3	130	153.—	290	342.2
16	18.9	44	51.9	76	89.7	140	165.—	300	354.—

Warper Production Calculation

To find pounds of production multiply the yards warped per minute by the multiplier opposite the number of yarn warped, and the product by the hours of operation times the number of ends. Example: To find the product of a warper running 52 yards per minute, on No. 18 yarn, with 410 ends on beam, for 40 hours (actual running time), $52 \times .00397 \times 410 \times 40 = 3385.6$.

Number of Yarn	Multipliers	Number of Yarn	Multipliers	Number of Yarn	Multipliers
6	.01190	27	.00265	48	.00149
7	.01020	28	.00255	49	.00146
8	.00893	29	.00246	50	.00143
9	.00794	30	.00238	52	.00137
10	.00714	31	.00230	54	.00132
11	.00649	32	.00223	56	.00127
12	.00595	33	.00213	58	.00123
13	.00549	34	.00210	60	.00119
14	.00510	35	.00204	62	.00115
15	.00476	36	.00198	64	.00112
16	.00446	37	.00193	66	.00108
17	.00420	38	.00188	68	.00105
18	.00397	39	.00183	70	.00102
19	.00376	40	.00179	75	.00095
20	.00357	41	.00174	80	.00089
21	.00340	42	.00170	85	.00084
22	.00325	43	.00166	90	.00079
23	.00311	44	.00162	95	.00075
24	.00298	45	.00159	100	.00071
25	.00286	46	.00155		
26	.00275	47	.00152		

Table for Use in Converting Linear Yards into Square Yards

Bureau of Census

The following table is made out in parallel columns. The first column refers to the width, in inches, of the woven products while the opposite figure represents the "equivalent" in square yards.

To convert linear yards to square yards, take the "equivalent" opposite the number representing the width in inches and multiply by the number of linear yards. Example: To convert 1,386,520 linear yards of cloth $38\frac{1}{2}$ inches wide into square yards — the "equivalent" of $38\frac{1}{2}$ inches is 1.069, which multiplied by 1,386,520 gives 1,482,190 square yards.

Width in Inches	Equiv- alent Square Yards	Width in Inches	Equiv- alent Square Yards	Width in Inches	Equiv- alent Square Yards	Width in Inches	Equiv- alent Square Yards	Width in Inches	Equiv- alent Square Yards	Width in Inches	Equiv- alent Square Yards
12 $\frac{1}{2}$	.347	28 $\frac{1}{2}$	.792	44 $\frac{1}{2}$	1.236	60 $\frac{1}{2}$	1.681	76 $\frac{1}{2}$	2.125	92 $\frac{1}{2}$	2.569
13	.361	29	.806	45	1.250	61	1.694	77	2.139	93	2.583
13 $\frac{1}{2}$	.375	29 $\frac{1}{2}$	.819	45 $\frac{1}{2}$	1.264	61 $\frac{1}{2}$	1.708	77 $\frac{1}{2}$	2.163	93 $\frac{1}{2}$	2.597
14	.389	30	.833	46	1.278	62	1.722	78	2.167	94	2.611
14 $\frac{1}{2}$	.403	30 $\frac{1}{2}$	.847	46 $\frac{1}{2}$	1.292	62 $\frac{1}{2}$	1.736	78 $\frac{1}{2}$	2.181	94 $\frac{1}{2}$	2.625
15	.417	31	.861	47	1.306	63	1.750	79	2.194	95	2.639
15 $\frac{1}{2}$	.431	31 $\frac{1}{2}$	.875	47 $\frac{1}{2}$	1.319	63 $\frac{1}{2}$	1.764	79 $\frac{1}{2}$	2.208	95 $\frac{1}{2}$	2.653
16	.444	32	.889	48	1.333	64	1.778	80	2.222	96	2.667
16 $\frac{1}{2}$	.458	32 $\frac{1}{2}$	.903	48 $\frac{1}{2}$	1.347	64 $\frac{1}{2}$	1.792	80 $\frac{1}{2}$	2.236	96 $\frac{1}{2}$	2.681
17	.472	33	.917	49	1.361	65	1.806	81	2.250	97	2.694
17 $\frac{1}{2}$	.486	33 $\frac{1}{2}$	.931	49 $\frac{1}{2}$	1.375	65 $\frac{1}{2}$	1.819	81 $\frac{1}{2}$	2.264	97 $\frac{1}{2}$	2.708
18	.500	34	.944	50	1.389	66	1.833	82	2.278	98	2.722
18 $\frac{1}{2}$	.514	34 $\frac{1}{2}$	.958	50 $\frac{1}{2}$	1.403	66 $\frac{1}{2}$	1.847	82 $\frac{1}{2}$	2.292	98 $\frac{1}{2}$	2.736
19	.528	35	.972	51	1.417	67	1.861	83	2.306	99	2.750
19 $\frac{1}{2}$	.542	35 $\frac{1}{2}$	.986	51 $\frac{1}{2}$	1.431	67 $\frac{1}{2}$	1.875	83 $\frac{1}{2}$	2.319	99 $\frac{1}{2}$	2.764
20	.556	36	1.000	52	1.444	68	1.889	84	2.333	100	2.778
20 $\frac{1}{2}$	.569	36 $\frac{1}{2}$	1.014	52 $\frac{1}{2}$	1.458	68 $\frac{1}{2}$	1.903	84 $\frac{1}{2}$	2.347	100 $\frac{1}{2}$	2.792
21	.583	37	1.028	53	1.472	69	1.917	85	2.361	101	2.806
21 $\frac{1}{2}$	.597	37 $\frac{1}{2}$	1.042	53 $\frac{1}{2}$	1.486	69 $\frac{1}{2}$	1.931	85 $\frac{1}{2}$	2.375	101 $\frac{1}{2}$	2.819
22	.611	38	1.056	54	1.500	70	1.944	86	2.389	102	2.833
22 $\frac{1}{2}$	.625	38 $\frac{1}{2}$	1.069	54 $\frac{1}{2}$	1.514	70 $\frac{1}{2}$	1.958	86 $\frac{1}{2}$	2.403	102 $\frac{1}{2}$	2.847
23	.639	39	1.083	55	1.528	71	1.972	87	2.417	103	2.861
23 $\frac{1}{2}$	.653	39 $\frac{1}{2}$	1.097	55 $\frac{1}{2}$	1.542	71 $\frac{1}{2}$	1.986	87 $\frac{1}{2}$	2.431	103 $\frac{1}{2}$	2.875
24	.667	40	1.111	56	1.556	72	2.000	88	2.444	104	2.889
24 $\frac{1}{2}$	.681	40 $\frac{1}{2}$	1.125	56 $\frac{1}{2}$	1.569	72 $\frac{1}{2}$	2.014	88 $\frac{1}{2}$	2.458	104 $\frac{1}{2}$	2.903
25	.694	41	1.139	57	1.583	73	2.028	89	2.472	105	2.917
25 $\frac{1}{2}$	.708	41 $\frac{1}{2}$	1.153	57 $\frac{1}{2}$	1.597	73 $\frac{1}{2}$	2.042	89 $\frac{1}{2}$	2.486	105 $\frac{1}{2}$	2.931
26	.722	42	1.167	58	1.611	74	2.056	90	2.500	106	2.944
26 $\frac{1}{2}$	.736	42 $\frac{1}{2}$	1.181	58 $\frac{1}{2}$	1.625	74 $\frac{1}{2}$	2.069	90 $\frac{1}{2}$	2.514	106 $\frac{1}{2}$	2.958
27	.750	43	1.194	59	1.639	75	2.083	91	2.528	107	2.972
27 $\frac{1}{2}$	.764	43 $\frac{1}{2}$	1.208	59 $\frac{1}{2}$	1.653	75 $\frac{1}{2}$	2.097	91 $\frac{1}{2}$	2.542	107 $\frac{1}{2}$	2.986
28	.778	44	1.222	60	1.667	76	2.111	92	2.556	108	3.000

Yards of Cloth per Loom per Hour

No allowance for stops

PICKS PER INCH	PICKS PER MINUTE										
	100	105	110	115	120	125	130	135	140	145	150
20	8.33	8.75	9.17	9.58	10.00	10.42	10.83	11.25	11.67	12.08	12.50
22	7.58	7.95	8.33	8.71	9.09	9.47	9.85	10.23	10.61	10.98	11.36
24	6.94	7.29	7.64	7.99	8.33	8.68	9.03	9.37	9.72	10.07	10.42
26	6.41	6.73	7.05	7.37	7.69	8.01	8.33	8.65	8.97	9.29	9.62
28	5.95	6.25	6.55	6.85	7.14	7.44	7.74	8.04	8.33	8.63	8.93
30	5.56	5.83	6.11	6.39	6.67	6.94	7.22	7.50	7.78	8.06	8.33
32	5.21	5.47	5.73	5.99	6.25	6.51	6.77	7.03	7.29	7.55	7.81
34	4.90	5.15	5.39	5.64	5.88	6.13	6.37	6.62	6.86	7.11	7.35
36	4.63	4.86	5.09	5.32	5.56	5.79	6.02	6.25	6.48	6.71	6.94
38	4.39	4.61	4.82	5.04	5.26	5.48	5.70	5.92	6.14	6.36	6.58
40	4.17	4.37	4.58	4.79	5.00	5.21	5.42	5.63	5.83	6.04	6.25
42	3.97	4.17	4.37	4.56	4.76	4.96	5.16	5.36	5.56	5.75	5.95
44	3.79	3.98	4.17	4.36	4.55	4.73	4.92	5.11	5.30	5.49	5.68
46	3.62	3.80	3.99	4.17	4.35	4.53	4.71	4.89	5.07	5.25	5.43
48	3.47	3.65	3.82	3.99	4.17	4.34	4.51	4.69	4.86	5.03	5.21
50	3.33	3.50	3.67	3.83	4.00	4.17	4.33	4.50	4.67	4.83	5.00
52	3.21	3.37	3.53	3.69	3.85	4.01	4.17	4.33	4.49	4.65	4.81
54	3.09	3.24	3.40	3.55	3.70	3.86	4.01	4.17	4.32	4.48	4.63
56	2.98	3.13	3.27	3.42	3.57	3.72	3.87	4.02	4.17	4.32	4.46
58	2.87	3.02	3.16	3.30	3.45	3.59	3.74	3.88	4.02	4.17	4.31
60	2.78	2.92	3.06	3.19	3.33	3.47	3.61	3.75	3.89	4.03	4.17
62	2.69	2.82	2.96	3.09	3.23	3.36	3.49	3.63	3.76	3.90	4.03
64	2.60	2.73	2.86	2.99	3.13	3.26	3.39	3.52	3.65	3.78	3.91
66	2.53	2.65	2.78	2.90	3.03	3.16	3.28	3.41	3.54	3.66	3.79
68	2.45	2.57	2.70	2.82	2.94	3.06	3.19	3.31	3.43	3.55	3.68
70	2.38	2.50	2.62	2.74	2.86	2.98	3.10	3.21	3.33	3.45	3.57
72	2.31	2.43	2.55	2.66	2.78	2.89	3.01	3.13	3.24	3.36	3.47
74	2.25	2.36	2.48	2.59	2.70	2.82	2.93	3.04	3.15	3.27	3.38
76	2.19	2.30	2.41	2.52	2.63	2.74	2.85	2.96	3.07	3.18	3.29
78	2.14	2.24	2.35	2.46	2.56	2.67	2.78	2.88	2.99	3.10	3.21
80	2.08	2.19	2.29	2.40	2.50	2.60	2.71	2.81	2.92	3.02	3.13
82	2.03	2.13	2.24	2.34	2.44	2.54	2.64	2.74	2.85	2.95	3.05
84	1.98	2.08	2.18	2.28	2.38	2.48	2.58	2.68	2.78	2.88	2.98
86	1.94	2.03	2.13	2.23	2.33	2.42	2.52	2.62	2.71	2.81	2.91
88	1.89	1.99	2.08	2.18	2.27	2.37	2.46	2.56	2.65	2.75	2.84
90	1.85	1.94	2.04	2.13	2.22	2.31	2.41	2.50	2.59	2.69	2.78
92	1.81	1.90	1.99	2.08	2.17	2.26	2.36	2.45	2.54	2.63	2.72
94	1.77	1.86	1.95	2.04	2.13	2.22	2.30	2.39	2.48	2.57	2.66
96	1.74	1.82	1.91	2.00	2.08	2.17	2.26	2.34	2.43	2.52	2.60
98	1.70	1.79	1.87	1.96	2.04	2.13	2.21	2.30	2.38	2.47	2.55
100	1.67	1.75	1.83	1.92	2.00	2.08	2.17	2.25	2.33	2.42	2.50

Yards of Cloth per Loom per Hour — (Continued)

No allowance for stops

PICKS PER INCH	PICKS PER MINUTE										
	155	160	165	170	175	180	185	190	195	200	205
20	12.92	13.33	13.75	14.17	14.58	15.00	15.42	15.83	16.25	16.67	17.08
22	11.74	12.12	12.50	12.88	13.26	13.64	14.02	14.39	14.77	15.15	15.53
24	10.76	11.11	11.46	11.81	12.15	12.50	12.85	13.19	13.54	13.89	14.24
26	9.94	10.26	10.58	10.90	11.22	11.54	11.86	12.18	12.50	12.82	13.14
28	9.23	9.52	9.82	10.12	10.42	10.71	11.01	11.31	11.61	11.90	12.20
30	8.61	8.89	9.17	9.44	9.72	10.00	10.28	10.55	10.83	11.11	11.39
32	8.07	8.33	8.59	8.85	9.11	9.37	9.64	9.90	10.16	10.42	10.68
34	7.60	7.84	8.09	8.33	8.58	8.82	9.07	9.31	9.56	9.80	10.05
36	7.18	7.41	7.64	7.87	8.10	8.33	8.56	8.80	9.03	9.26	9.49
38	6.80	7.02	7.24	7.46	7.68	7.89	8.11	8.33	8.55	8.77	8.99
40	6.46	6.67	6.87	7.08	7.29	7.50	7.71	7.92	8.13	8.33	8.54
42	6.15	6.35	6.55	6.75	6.94	7.14	7.34	7.54	7.74	7.94	8.13
44	5.87	6.06	6.25	6.44	6.63	6.82	7.01	7.20	7.39	7.58	7.77
46	5.62	5.80	5.98	6.16	6.34	6.52	6.70	6.88	7.07	7.25	7.43
48	5.38	5.56	5.73	5.90	6.08	6.25	6.42	6.60	6.77	6.94	7.12
50	5.17	5.33	5.50	5.67	5.83	6.00	6.17	6.33	6.50	6.67	6.83
52	4.97	5.13	5.29	5.45	5.61	5.77	5.93	6.09	6.25	6.41	6.57
54	4.78	4.94	5.09	5.25	5.40	5.56	5.71	5.86	6.02	6.17	6.33
56	4.61	4.76	4.91	5.06	5.21	5.36	5.51	5.65	5.80	5.95	6.10
58	4.45	4.60	4.74	4.88	5.03	5.17	5.32	5.46	5.60	5.75	5.89
60	4.31	4.44	4.58	4.72	4.86	5.00	5.14	5.28	5.42	5.56	5.69
62	4.17	4.30	4.44	4.57	4.70	4.84	4.97	5.11	5.24	5.38	5.51
64	4.04	4.17	4.30	4.43	4.56	4.69	4.82	4.95	5.08	5.21	5.34
66	3.91	4.04	4.17	4.29	4.42	4.55	4.67	4.80	4.92	5.05	5.18
68	3.80	3.92	4.04	4.17	4.29	4.41	4.53	4.66	4.78	4.90	5.02
70	3.69	3.81	3.93	4.05	4.17	4.29	4.40	4.52	4.64	4.76	4.88
72	3.59	3.70	3.82	3.94	4.05	4.17	4.28	4.40	4.51	4.63	4.75
74	3.49	3.60	3.72	3.83	3.94	4.05	4.17	4.28	4.39	4.50	4.62
76	3.40	3.51	3.62	3.73	3.84	3.95	4.06	4.17	4.28	4.39	4.50
78	3.31	3.42	3.53	3.63	3.74	3.85	3.95	4.06	4.17	4.27	4.38
80	3.23	3.33	3.44	3.54	3.65	3.75	3.85	3.96	4.06	4.17	4.27
82	3.15	3.25	3.35	3.46	3.56	3.66	3.76	3.86	3.96	4.07	4.17
84	3.08	3.17	3.27	3.37	3.47	3.57	3.66	3.77	3.87	3.97	4.07
86	3.00	3.10	3.20	3.29	3.39	3.49	3.58	3.68	3.78	3.88	3.97
88	2.94	3.03	3.13	3.22	3.31	3.41	3.50	3.60	3.69	3.79	3.88
90	2.87	2.96	3.06	3.15	3.24	3.33	3.43	3.52	3.61	3.70	3.80
92	2.81	2.90	2.99	3.08	3.17	3.26	3.35	3.44	3.53	3.62	3.71
94	2.75	2.84	2.93	3.01	3.10	3.19	3.28	3.37	3.46	3.55	3.63
96	2.69	2.78	2.86	2.95	3.04	3.13	3.21	3.30	3.39	3.47	3.56
98	2.64	2.72	2.81	2.89	2.98	3.06	3.15	3.23	3.32	3.40	3.49
100	2.58	2.67	2.75	2.83	2.92	3.00	3.08	3.17	3.25	3.33	3.44

Yards of Cloth per Loom per Hour — (Continued)

No allowance for stops

Picks per Inch	Picks per Minute										
	100	105	110	115	120	125	130	135	140	145	150
102	1.63	1.72	1.80	1.88	1.96	2.04	2.12	2.21	2.29	2.37	2.45
104	1.60	1.68	1.76	1.84	1.92	2.00	2.08	2.16	2.24	2.32	2.40
106	1.57	1.65	1.73	1.81	1.89	1.97	2.04	2.12	2.20	2.28	2.36
108	1.54	1.62	1.70	1.77	1.85	1.93	2.01	2.08	2.16	2.24	2.31
110	1.52	1.59	1.67	1.74	1.82	1.89	1.97	2.05	2.12	2.20	2.27
112	1.49	1.56	1.64	1.71	1.79	1.86	1.93	2.01	2.08	2.16	2.23
114	1.46	1.54	1.61	1.68	1.75	1.83	1.90	1.97	2.05	2.12	2.19
116	1.44	1.51	1.58	1.65	1.72	1.80	1.87	1.94	2.01	2.08	2.16
118	1.41	1.48	1.55	1.62	1.69	1.77	1.84	1.91	1.98	2.05	2.12
120	1.39	1.46	1.53	1.60	1.67	1.74	1.81	1.87	1.94	2.01	2.08
122	1.37	1.43	1.50	1.57	1.64	1.71	1.78	1.84	1.91	1.98	2.04
124	1.34	1.41	1.48	1.55	1.61	1.68	1.75	1.81	1.88	1.95	2.01
126	1.32	1.39	1.46	1.52	1.59	1.65	1.72	1.79	1.85	1.92	1.98
128	1.30	1.37	1.43	1.50	1.56	1.63	1.69	1.76	1.82	1.89	1.95
130	1.28	1.35	1.41	1.47	1.54	1.60	1.67	1.73	1.79	1.86	1.92
134	1.24	1.31	1.37	1.43	1.49	1.55	1.62	1.68	1.74	1.80	1.87
136	1.23	1.29	1.35	1.41	1.47	1.53	1.59	1.65	1.72	1.78	1.84
140	1.19	1.25	1.31	1.37	1.43	1.49	1.55	1.61	1.67	1.73	1.79
144	1.16	1.22	1.27	1.33	1.39	1.45	1.50	1.56	1.62	1.68	1.74
146	1.14	1.20	1.26	1.31	1.37	1.43	1.48	1.54	1.60	1.66	1.71
150	1.11	1.17	1.22	1.28	1.33	1.39	1.44	1.50	1.56	1.61	1.67
154	1.08	1.14	1.19	1.24	1.30	1.35	1.41	1.46	1.52	1.57	1.62
156	1.07	1.12	1.18	1.23	1.28	1.34	1.39	1.44	1.50	1.55	1.60
160	1.04	1.09	1.15	1.20	1.25	1.30	1.35	1.41	1.46	1.51	1.56
164	1.02	1.07	1.12	1.17	1.22	1.27	1.32	1.37	1.42	1.47	1.52
166	1.00	1.05	1.10	1.15	1.20	1.26	1.31	1.35	1.41	1.46	1.51
170	.98	1.03	1.08	1.13	1.18	1.23	1.27	1.32	1.37	1.42	1.47
174	.96	1.01	1.05	1.10	1.15	1.20	1.25	1.29	1.34	1.39	1.44
176	.95	.99	1.04	1.09	1.14	1.18	1.23	1.28	1.33	1.37	1.42
180	.93	.97	1.02	1.06	1.11	1.16	1.20	1.25	1.30	1.34	1.39

Yards of Cloth per Loom per Hour — (Concluded)

No allowance for stops

PICKS PER INCH	PICKS PER MINUTE										
	155	160	165	170	175	180	185	190	195	200	205
102	2.53	2.61	2.70	2.78	2.86	2.94	3.02	3.10	3.19	3.27	3.35
104	2.48	2.56	2.64	2.72	2.80	2.88	2.96	3.04	3.13	3.21	3.29
106	2.44	2.52	2.59	2.67	2.75	2.83	2.91	2.99	3.07	3.14	3.22
108	2.39	2.47	2.55	2.62	2.70	2.78	2.85	2.93	3.01	3.09	3.16
110	2.35	2.42	2.50	2.58	2.65	2.73	2.80	2.88	2.95	3.03	3.11
112	2.31	2.38	2.46	2.53	2.60	2.68	2.75	2.83	2.90	2.98	3.05
114	2.27	2.34	2.41	2.49	2.56	2.63	2.70	2.78	2.85	2.92	3.00
116	2.23	2.30	2.37	2.44	2.51	2.59	2.66	2.73	2.80	2.87	2.95
118	2.19	2.26	2.33	2.40	2.47	2.54	2.61	2.68	2.75	2.82	2.90
120	2.15	2.22	2.29	2.36	2.43	2.50	2.57	2.64	2.71	2.78	2.85
122	2.12	2.19	2.25	2.32	2.39	2.46	2.53	2.60	2.66	2.73	2.80
124	2.08	2.15	2.22	2.28	2.35	2.42	2.49	2.55	2.62	2.69	2.76
126	2.05	2.12	2.18	2.25	2.31	2.38	2.45	2.51	2.58	2.65	2.71
128	2.02	2.08	2.15	2.21	2.28	2.34	2.41	2.47	2.54	2.60	2.67
130	1.99	2.05	2.12	2.18	2.24	2.31	2.37	2.44	2.50	2.56	2.63
134	1.93	1.99	2.05	2.11	2.18	2.24	2.30	2.36	2.43	2.49	2.55
136	1.90	1.96	2.02	2.08	2.14	2.21	2.27	2.33	2.39	2.45	2.51
140	1.85	1.90	1.96	2.02	2.08	2.14	2.20	2.26	2.32	2.38	2.44
144	1.79	1.85	1.91	1.97	2.03	2.08	2.14	2.20	2.26	2.31	2.37
146	1.77	1.83	1.88	1.94	2.00	2.05	2.11	2.17	2.23	2.28	2.34
150	1.72	1.78	1.83	1.89	1.94	2.00	2.06	2.11	2.17	2.22	2.28
154	1.68	1.73	1.79	1.84	1.89	1.95	2.00	2.06	2.11	2.16	2.22
156	1.66	1.71	1.76	1.82	1.87	1.92	1.98	2.03	2.08	2.14	2.19
160	1.61	1.67	1.72	1.77	1.82	1.87	1.93	1.98	2.03	2.08	2.14
164	1.58	1.63	1.68	1.73	1.78	1.83	1.88	1.93	1.98	2.03	2.08
166	1.56	1.61	1.66	1.71	1.76	1.81	1.86	1.91	1.96	2.01	2.06
170	1.52	1.57	1.62	1.67	1.72	1.76	1.81	1.86	1.91	1.96	2.01
174	1.48	1.54	1.58	1.63	1.68	1.72	1.77	1.82	1.87	1.92	1.96
176	1.47	1.52	1.56	1.61	1.66	1.70	1.75	1.80	1.85	1.89	1.94
180	1.44	1.48	1.53	1.57	1.62	1.67	1.71	1.76	1.81	1.85	1.90

Average Yarn Sizes for Knitting Machines

Courtesy of the Textile World

The accompanying table gives the averages of yarn sizes used on machines with different needles per inch. Yarns coarser or finer can be used, of course, but this table will serve as a guide.

RIB MACHINES			Cylinder Needles per Inch	PLAIN MACHINES		
Woolen	Worsted	Cotton		Cotton	Worsted	Woolen
.75	2.25	1.5	3	.75	1.1	.40
1.25	3.75	2.5	4	1.5	2.25	.75
2.00	6.0	4.0	5	2.0	3.0	1.00
3.00	9.0	6.0	6	3.0	4.5	1.50
4.25	12.0	8.0	7	4.0	6.0	2.00
5.25	15.0	10.0	8	5.0	7.5	2.50
6.75	19.5	13.0	9	6.0	9.0	3.00
8.50	24.0	16.0	10	7.0	10.5	3.75
	30.0	20.0	11	8.0	12.0	4.25
	36.0	24.0	12	10.0	15.0	5.25
	42.0	28.0	13	12.0	18.0	6.25
	45.0	30.0	14	14.0	21.0	7.25
	50.0	33.0	15	16.0	24.0	8.50
	54.0	36.0	16	20.0	30.0	
	60.0	40.0	17	22.0	33.0	
			18	25.0	37.0	
			19	27.0	41.0	
			20	30.0	45.0	
			21	32.0	48.0	
			22	35.0	53.0	
			24	40.0	60.0	

Full Fashion { 39 gauge, 10 to 12 thread silk
42 gauge, 8 to 10 thread silk

Reasonable Allowance for Stops

Courtesy of the Textile World

The following figures show a reasonable allowance for stoppage of different classes of knitting mill machinery. They indicate the average percentage of the running time lost under normal conditions.

	Per Cent
Winders	5 to 25
Flat machines	5 to 20
Small ribbers	10
Large ribbers	15
Loop wheel machines	10
Automatics	10

Table Showing Number of Slots in Cylinders of Different Cuts

Courtesy of the Textile World

[Noeilles per inch]

Size of Machine	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	24	26	28
2	20	24	32	38	44	50	56	64	70	76	80	88	94	100	108	116	122	128	132	140	152	160	176
2 1/2	22	28	36	42	48	54	60	68	76	84	92	100	108	116	124	132	140	148	156	164	172	184	200
3	24	30	38	46	54	62	70	78	86	94	102	110	120	130	140	150	160	170	180	192	208	224	240
3 1/2	26	32	40	48	56	64	72	80	88	96	104	112	122	132	142	152	162	172	182	192	208	224	240
4	28	34	42	50	58	66	74	82	90	98	106	114	124	134	144	154	164	174	184	194	210	226	242
4 1/2	30	36	44	52	60	68	76	84	92	100	108	116	126	136	146	156	166	176	186	196	212	228	244
5	32	38	46	54	62	70	78	86	94	102	110	118	128	138	148	158	168	178	188	198	214	230	246
5 1/2	34	40	48	56	64	72	80	88	96	104	112	120	130	140	150	160	170	180	190	200	216	232	248
6	36	42	50	58	66	74	82	90	98	106	114	122	132	142	152	162	172	182	192	202	218	234	250
6 1/2	38	44	52	60	68	76	84	92	100	108	116	124	134	144	154	164	174	184	194	204	220	236	252
7	40	46	54	62	70	78	86	94	102	110	118	126	136	146	156	166	176	186	196	206	222	238	254
8	42	48	56	64	72	80	88	96	104	112	120	128	138	148	158	168	178	188	198	208	224	240	256
9	44	50	58	66	74	82	90	98	106	114	122	130	140	150	160	170	180	190	200	210	226	242	258
10	46	52	60	68	76	84	92	100	108	116	124	132	142	152	162	172	182	192	202	212	228	244	260
11	48	54	62	70	78	86	94	102	110	118	126	134	144	154	164	174	184	194	204	214	230	246	262
12	50	56	64	72	80	88	96	104	112	120	128	136	146	156	166	176	186	196	206	216	232	248	264
13	52	58	66	74	82	90	98	106	114	122	130	138	148	158	168	178	188	198	208	218	234	250	266
14	54	60	68	76	84	92	100	108	116	124	132	140	150	160	170	180	190	200	210	220	236	252	268
15	56	62	70	78	86	94	102	110	118	126	134	142	152	162	172	182	192	202	212	222	238	254	270
16	58	64	72	80	88	96	104	112	120	128	136	144	154	164	174	184	194	204	214	224	240	256	272
17	60	66	74	82	90	98	106	114	122	130	138	146	156	166	176	186	196	206	216	226	242	258	274
18	62	68	76	84	92	100	108	116	124	132	140	148	158	168	178	188	198	208	218	228	244	260	276
19	64	70	78	86	94	102	110	118	126	134	142	150	160	170	180	190	200	210	220	230	246	262	278
20	66	72	80	88	96	104	112	120	128	136	144	152	162	172	182	192	202	212	222	232	248	264	280
21	68	74	82	90	98	106	114	122	130	138	146	154	164	174	184	194	204	214	224	234	250	266	282
22	70	76	84	92	100	108	116	124	132	140	148	156	166	176	186	196	206	216	226	236	252	268	284
23	72	78	86	94	102	110	118	126	134	142	150	158	168	178	188	198	208	218	228	238	254	270	286
24	74	80	88	96	104	112	120	128	136	144	152	160	170	180	190	200	210	220	230	240	256	272	288
25	76	82	90	98	106	114	122	130	138	146	154	162	172	182	192	202	212	222	232	242	258	274	290
26	78	84	92	100	108	116	124	132	140	148	156	164	174	184	194	204	214	224	234	244	260	276	292
27	80	86	94	102	110	118	126	134	142	150	158	166	176	186	196	206	216	226	236	246	262	278	294
28	82	88	96	104	112	120	128	136	144	152	160	168	178	188	198	208	218	228	238	248	264	280	296
29	84	90	98	106	114	122	130	138	146	154	162	170	180	190	200	210	220	230	240	250	266	282	298
30	86	92	100	108	116	124	132	140	148	156	164	172	182	192	202	212	222	232	242	252	268	284	300
31	88	94	102	110	118	126	134	142	150	158	166	174	184	194	204	214	224	234	244	254	270	286	302
32	90	96	104	112	120	128	136	144	152	160	168	176	186	196	206	216	226	236	246	256	272	288	304
33	92	98	106	114	122	130	138	146	154	162	170	178	188	198	208	218	228	238	248	258	274	290	306
34	94	100	108	116	124	132	140	148	156	164	172	180	190	200	210	220	230	240	250	260	276	292	308
35	96	102	110	118	126	134	142	150	158	166	174	182	192	202	212	222	232	242	252	262	278	294	310
36	98	104	112	120	128	136	144	152	160	168	176	184	194	204	214	224	234	244	254	264	280	296	312
37	100	106	114	122	130	138	146	154	162	170	178	186	196	206	216	226	236	246	256	266	282	298	314
38	102	108	116	124	132	140	148	156	164	172	180	188	198	208	218	228	238	248	258	268	284	300	316
39	104	110	118	126	134	142	150	158	166	174	182	190	200	210	220	230	240	250	260	270	286	302	318
40	106	112	120	128	136	144	152	160	168	176	184	192	202	212	222	232	242	252	262	272	288	304	320
41	108	114	122	130	138	146	154	162	170	178	186	194	204	214	224	234	244	254	264	274	290	306	322
42	110	116	124	132	140	148	156	164	172	180	188	196	206	216	226	236	246	256	266	276	292	308	324
43	112	118	126	134	142	150	158	166	174	182	190	200	210	220	230	240	250	260	270	280	296	312	328
44	114	120	128	136	144	152	160	168	176	184	192	202	212	222	232	242	252	262	272	282	298	314	330
45	116	122	130	138	146	154	162	170	178	186	194	204	214	224	234	244	254	264	274	284	300	316	332
46	118	124	132	140	148	156	164	172	180	188	196	206	216	226	236	246	256	266	276	286	302	318	334
47	120	126	134	142	150	158	166	174	182	190	200	210	220	230	240	250	260	270	280	290	306	322	338
48	122	128	136	144	152	160	168	176	184	192	202	212	222	232	242	252	262	272	282	292	308	324	340
49	124	130	138	146	154	162	170	178	186	194	204	214	224	234	244	254	264	274	284	294	310	326	342
50	126	132	140	148	156	164	172	180	188	196	206	216	226	236	246	256	266	276	286	296	312	328	344
51	128	134	142	150	158	166	174	182	190	200	210	220	230	240	250	260	270	280	290	300	316	332	348
52	130	136	144	152	160	168	176	184	192	202	212	222	232	242	252	262	272	282	292	302	318	334	350
53	132	138	146	154	162	170	178	186	194	204	214	224	234	244	254	264	274	284	294	304	320	336	352
54	134	140	148	156	164	172	180	188	196	206	216	226	236	246	256	266	276	286	296	306	322	338	354
55	136	142	150	158	166	174	182	190	200	210	220	230	240	250	260	270	280	290	300	310	326	342	358
56	138	144	152	160	168	176	184	192	202	212	222	232	242	252	262	272	282	292	302	312	328	344	360
57	140	146	154	162	170	178	186	194	204	214	224	234	244	254	264	274	284	294	304	314	330	346	362
58	142	148	156	164	172	180	188	196	206	216	226	236	246	256	266	276	286	296	306	316	332	348	364
59	144																						

Latch Needle Gauge and Needles Per Inch

Courtesy of the Textile World

The common gauges of latch needles are listed here with the number of needles per inch in the cylinder of the machines to correspond with them.

NEEDLE GAUGE	NEEDLES PER INCH	
	Ribbers	Automatics
2	1-2	—
4	2-3	—
8	3-4	—
12	3-5	5 — 8.4
18	4-7	8.4-10.1
24	6-9	10.3-11.6
36	8-13	11.6-14.9
48	10-15	15.0-18.6
54	—	18.3-20.3
60	16 and up	—

Production of Cotton Rib Underwear

Compiled by Gilbert R. Merrill

[Per 9 hours, no stops, 1 foot yarn for 4 inches of needles]

CUT	Yarn Size	Production per Feed [In Pounds]
4	2 $\frac{1}{2}$	50.0
5	4	29.0
6	6	20.0
7	8	15.0
8	10	12.0
9	13	9.1
10	16	7.4
11	20	5.9
12	24	4.9
13	28	4.2
14	34	3.5

Average Underwear Production

Compiled by Gilbert R. Merrill

[Dozen garments per 10 hours]

OPERATION	Union Suits	Shirts	Drawers	Usual Operative
Knit (6 to 10 machines):				
Webbing	36-60	60-90	42-90	Man
Cuffs	300-325	300-325	300-325	Man
Collarettes	500-600	500-600	-	Man
Nap (3 machines)	180	420	300	Man
Cut:				
Hand	40	100	100	Man
Machine	200	375	375	Man
Examine and dozen	300	300	300	Woman
Cuff	50	100	100	Woman
Welt	-	75	-	Woman
Seam	11-18	35-45	25-45	Woman
Cover seam	20-25	40-75	40-60	Woman
Layout and mark neck	125-150	150-200	-	Woman
Neck	140-150	175-200	-	Woman
Neck cut	125-160	150-200	-	Woman
Face	50-75	120-160	-	Woman
Button stay	60-75	140-185	-	Woman
Collarette	40-80	40-80	-	Woman
Overedge	60-125	100-200	-	Woman
Tack and bind	50-75	50-100	-	Woman
Trim	-	-	150-175	Woman
Double seat	50	-	65-75	Woman
Finish	-	-	18-22	Woman
Strap	-	-	90-100	Woman
Eyelet:				
Punched	-	-	300-320	Woman
Worked	-	-	550-600	Woman
Buttonholes	50 (8 button)	100 (4 button)	150 (3 button)	Woman
Mark buttons	100 (8 button)	200 (4 button)	250 (3 button)	Woman
Sew buttons	60 (8 button)	125 (4 button)	140 (3 button)	Woman
Examine	25-30	50-85	45-60	Woman
Mend garments	150-200	150-200	150-200	Woman
Label	80	80	80	Woman
Press	45-80	70-140	80-150	Man
Fold	45-60	90	100	Woman
Box	150	300-350	300-400	Woman

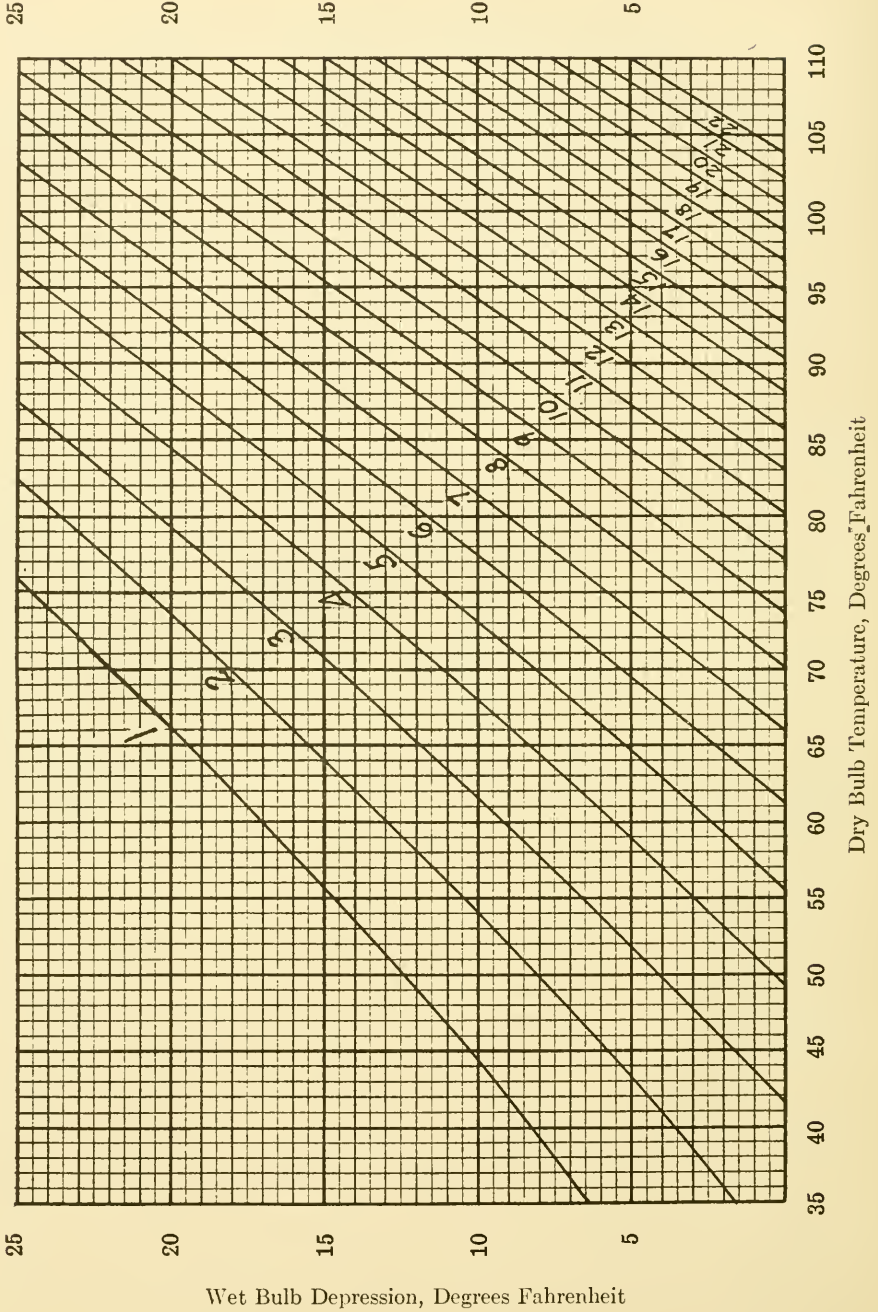
Above figures are for plant having a capacity of 800 dozen per day, with 7 to 8 per cent seconds.

Order of inspection: first, for heavy or light ends, dust marks, discolored buttons, crooked or strained seams; second, for seams, buttons and buttonholes, neck, leg, and sleeve finish.

Absolute Humidity

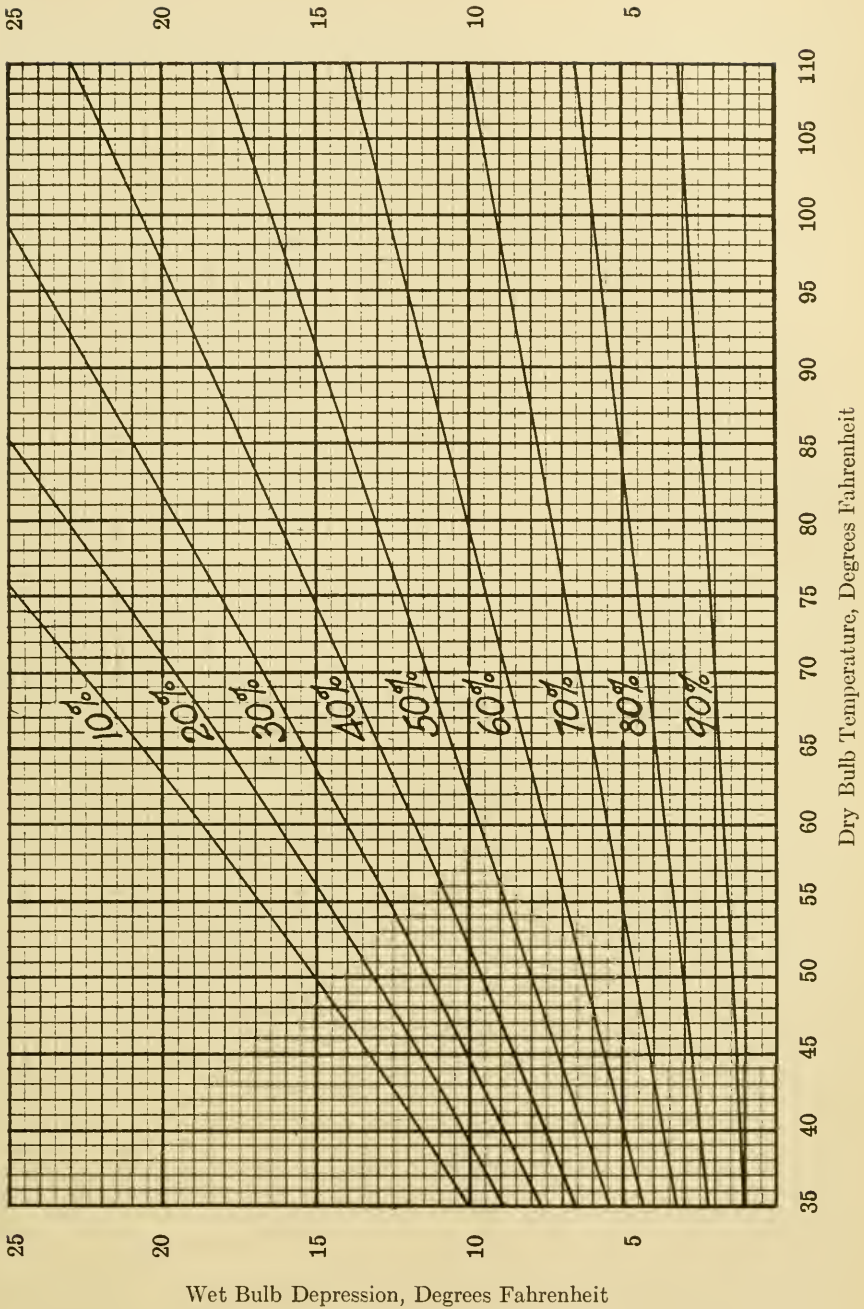
Grains of moisture per cubic foot

Courtesy Parks-Cramer Company

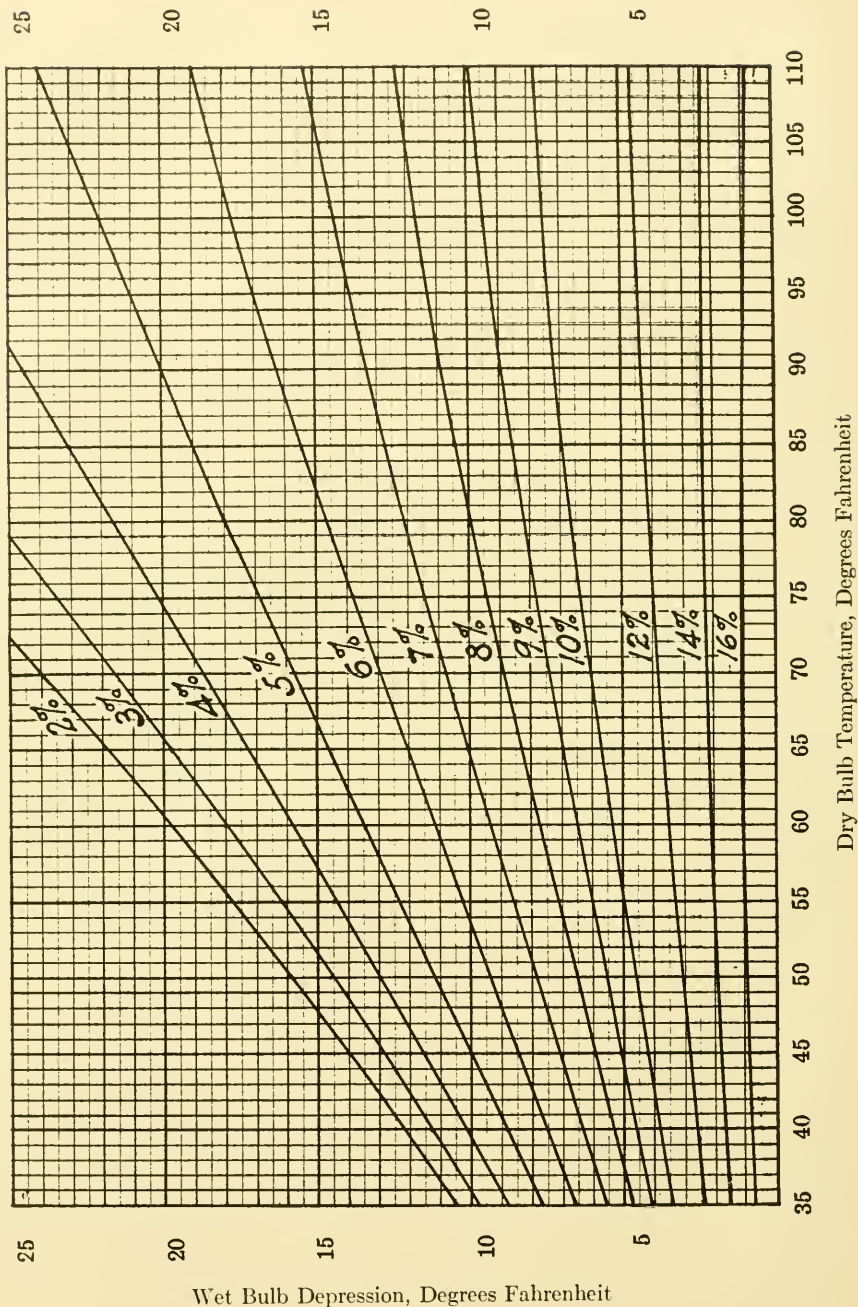


Relative Humidity

Courtesy Parks-Cramer Company



Cotton Regain
Theoretical Regain for Raw Cotton
Courtesy Parks-Cramer Company



Psychrometric Humidity Table for Use with Sling Psychrometer only

Courtesy Parks-Cramer Company

TEMP OF DRY BULB	Relative Humidities—Large Figures															Actual Humidities—Small Figures										
	WET BULB DEPRESSION																									
	F°	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°	20°	21°	22°	23°	24°
60	100	94	89	83	78	73	68	63	58	53	48	43	39	34	30	26	21	17	13	9	5	1				
61	100	94	89	84	78	73	68	63	58	54	49	44	40	35	31	27	22	18	14	10	7	3				
62	100	94	89	84	79	74	69	64	59	54	50	45	41	36	32	28	24	20	16	12	8	4				
63	100	95	89	84	79	74	69	64	60	55	50	46	42	37	33	29	25	21	17	13	10	6	2			
64	100	95	90	84	79	74	70	65	60	56	51	47	43	38	34	30	26	22	18	15	11	7	4			
65	100	95	90	85	80	75	70	66	61	56	52	48	44	39	35	31	27	24	20	16	12	9	5	2		
66	100	95	90	85	80	75	71	66	61	57	53	48	44	40	36	32	29	25	21	17	14	10	7	3		
67	100	95	90	85	80	76	71	66	62	58	53	49	45	41	37	33	30	26	22	19	15	12	8	5	2	
68	100	95	90	85	80	76	71	67	62	58	54	50	46	42	38	34	31	27	23	20	16	13	10	6	3	
69	100	95	90	85	81	76	72	67	63	59	55	51	47	43	39	35	32	28	24	21	18	14	11	8	5	2
70	100	95	90	86	81	77	72	68	64	59	55	51	48	44	40	36	33	29	25	22	19	15	12	9	6	
71	100	95	90	86	81	77	73	68	64	60	56	52	48	45	41	37	34	30	27	23	20	17	13	10	7	
72	100	95	91	86	82	77	73	69	65	61	57	53	49	45	42	38	34	31	28	24	21	18	15	12	9	
73	100	95	91	86	82	78	73	69	65	61	57	53	50	46	42	39	35	32	29	25	22	19	16	13	10	
74	100	95	91	86	82	78	74	69	65	61	58	54	50	47	43	39	36	33	29	26	23	20	17	14	11	
75	100	96	91	86	82	78	74	70	66	62	58	54	51	47	44	40	37	34	31	28	25	22	19	16	13	
76	100	96	91	87	82	78	74	70	66	62	59	55	51	48	44	41	38	34	31	28	25	22	19	16	13	
77	100	96	91	87	83	79	74	71	67	63	59	56	52	48	45	42	39	35	32	29	26	23	20	17	14	
78	100	96	91	87	83	79	75	71	67	63	60	56	53	49	46	43	39	36	33	30	27	24	21	18	15	
79	100	96	91	87	83	79	75	71	68	64	60	57	53	50	46	43	40	37	34	31	28	25	22	19	17	
80	100	96	91	87	83	79	75	72	68	64	61	57	54	50	47	44	41	38	35	32	29	26	23	20	18	
81	100	96	92	88	84	80	76	72	68	65	61	58	55	51	48	45	41	39	36	33	30	27	24	21	19	
82	100	96	92	88	84	80	76	72	69	65	61	58	55	51	48	45	42	39	36	33	30	28	25	22	20	
83	100	96	92	88	84	80	76	73	69	66	62	59	56	52	49	46	43	40	37	34	31	28	25	23	20	
84	100	96	92	88	84	80	76	73	69	66	62	59	56	52	49	46	43	40	37	35	32	29	26	24	21	
85	100	96	92	88	84	80	77	73	69	66	63	60	57	53	50	47	44	41	38	36	33	30	27	25	22	
86	100	96	92	88	84	81	77	73	69	66	63	60	57	53	50	47	44	42	39	36	33	31	28	26	23	
87	100	96	92	88	85	81	77	74	70	67	64	61	57	54	51	48	45	43	40	37	34	32	29	27	24	
88	100	96	92	88	85	81	77	74	70	67	64	61	57	54	51	48	46	43	40	37	35	32	30	27	25	
89	100	96	92	88	85	81	77	74	70	67	64	61	57	54	51	48	46	43	40	37	35	33	30	28	25	
90	100	96	92	89	85	81	78	74	71	68	65	61	58	55	52	49	47	44	41	39	36	34	31	29	26	
91	100	96	92	89	85	82	78	75	72	68	65	62	59	56	53	50	48	45	42	40	37	35	32	30	27	
92	100	96	92	89	85	82	78	75	72	69	66	63	60	57	54	51	49	46	43	41	38	36	33	31	29	
93	100	96	93	89	85	82	79	75	72	69	66	63	60	57	54	51	49	46	43	41	38	36	33	31	29	
94	100	96	93	89	85	82	79	75	72	69	66	63	60	57	54	51	49	46	43	41	38	36	33	31	29	
95	100	96	93	89	85	82	79	75	72	69	66	63	60	57	54	51	49	46	43	41	38	36	34	31	29	
96	100	96	93	89	86	82	79	76	73	69	66	63	61	58	55	52	50	47	44	42	39	37	35	32	30	
97	100	96	93	89	86	82	79	76	73	69	66	63	61	58	55	52	50	47	44	42	39	37	35	33	31	
98	100	96	93	89	86	83	79	76	73	70	67	64	61	58	56	53	50	48	45	43	40	38	36	34	32	
99	100	96	93	89	86	83	80	77	73	70	68	65	62	59	56	54	51	49	46	44	41	39	37	35	33	
RELATIVE HUMIDITIES IN PERCENTAGES (°F). ACTUAL HUMIDITIES IN GRAINS OF MOISTURE PER CUBIC FOOT OF AIR.																										

RELATIVE HUMIDITIES IN PERCENTAGES—% ACTUAL HUMIDITIES IN GRAMS OF MOISTURE PER CUBIC FOOT OF AIR

Percent cotton regain 11 10 9 8 7 6 5

Maximum Limits of Humidity at Given Temperatures when Artificial Humidification is employed

General Laws, chapter 149, section 110, Commonwealth of Massachusetts

I Dry Bulb Thermometer Readings (Degrees Fahr.)	II Wet Bulb Thermometer Readings (Degrees Fahr.)	III Percentage of Humidity	I Dry Bulb Thermometer Readings (Degrees Fahr.)	II Wet Bulb Thermometer Readings (Degrees Fahr.)	III Percentage of Humidity
60	58	88	78	73.5	77
61	59	88	79	74.5	77.5
62	60	88	80	75.5	77.5
63	61	88	81	76	76
64	62	88	82	76.5	74
65	63	88	83	77.5	74
66	64	88	84	78	72
67	65	88	85	79	72
68	66	88	86	80	72
69	67	88	87	80.5	71
70	68	88	88	81.5	71
71	68.5	85.5	89	82.5	71
72	69	84	90	83	69
73	70	84	91	83.5	68
74	70.5	81.5	92	84.5	68
75	71.5	81.5	93	85.5	68
76	72	79	94	86	68
77	73	79	95	87	66

Grades and Colors of the Universal Standards for American Upland Cotton

United States Department of Agriculture Circular 278

Blue- stained	Gray	Standards for Grades of Upland Cotton, White	Spotted	Yellow- tinged	Light- stained	Yellow- stained
		1 or midling fair				
		2 or strict good midling		2 T.		
3 B.	3 G.	3 or good midling	3 Sp.	3 T.	3 L. S.	3 S.
4 B.	4 G.	4 or strict midling	4 Sp.	4 T.	4 L. S.	4 S.
5 B.	5 G.	5 or midling	5 Sp.	5 T.	5 L. S.	5 S.
		6 or strict low midling	6 Sp.	6 T.		
		7 or low midling	7 Sp.	7 T.		
		8 or strict good ordinary				
		9 or good ordinary				

Symbols in heavy type denote grades and colors for which practical forms of the official cotton standards are prepared. Symbols in italics represent the designations of cotton which in color is between practical forms.

The grades shown above the black lines are deliverable on future contracts made in accordance with section 5 of the United States Cotton Futures Act. Those below the line are untenderable on such contracts.

Standard Textile Test Methods of the Federal Specifications Board

ATMOSPHERIC CONDITIONS

Tests may be made under prevailing atmospheric conditions except in the settlement of disputes where moisture is an influencing factor in tests for breaking strength, thread count, weight, width, length, shrinkage, impregnation, etc. Such tests shall then be made upon material having normal moisture content, obtained by exposure for at least four hours to an atmospheric condition of 65 per cent relative humidity at 70° F.

The effect of humidity is a decided variable in these tests, depending on the construction, finishing, sizing, etc. A high relative humidity will increase all weight results, and in breaking strength results will show an increase for vegetable fibers and a decrease for animal fibers. The manufacturer should note the humidity on a sling psychrometer at the time tests are made to establish whether his material conforms to these specifications, and take into consideration the above facts.

BREAKING STRENGTH, STRIP METHOD

PREPARATION OF TEST SPECIMENS. — Six test specimens approximately — inches (see Table A) long by — inches wide shall be cut, three in the direction of the warp and three in the direction of the filling, respectively. Each specimen shall be ravelled to exactly 1 inch by taking from each side approximately the same number of threads. (See Fig. 1.) Care shall be taken that no two test specimens include the same threads, except for retest as specified below. No specimen for testing shall be taken at less than 8 inches from either selvage.

PERFORMANCE OF TEST. — The machine used shall be of the inclination balance type. The capacity of the machine shall be — pounds. The lower or pulling jaw shall travel at a uniform rate of 12 inches per minute under no load. The distance between jaws shall be — inches at the start of test. The width of the jaws shall be $1\frac{1}{2}$ inches or more. Jaws shall have a smooth and flat surface with edges slightly rounded to prevent cutting. The results of the tests in each direction shall be averaged. If a specimen slips in the jaw, breaks in the jaw, breaks at the edge of the jaw, or for any reason due to faulty operation the result falls markedly below the general average, the results shall be disregarded, another specimen taken from the same threads, and the result of this break included in the average.

BREAKING STRENGTH, GRAB METHOD (1x1x3 INCHES)

PREPARATION OF TEST SPECIMENS. — Six test specimens 6 inches long by 4 inches wide shall be cut, three in the direction of the warp and three in the direction of the filling, respectively. (See Fig. 2.) Care shall be taken that no two test specimens include the same threads, except for retest as specified below. No sample for testing should be taken at less than 8 inches from either selvage.

PERFORMANCE OF TEST. — The machine used shall be of the inclination balance type. The maximum capacity of the machine shall be — pounds. The lower or pulling jaw shall travel at a uniform rate of 12 inches per minute under no load. The distance between jaws shall be 3 inches at start of test. The inside or back half of each jaw shall be 2 inches or more in width; the other half shall be 1 inch in width. Jaws shall have a smooth and flat surface with edges slightly rounded to prevent cutting. The results of the test of each direction shall be averaged. If a specimen slips in the jaw, breaks in the jaw, breaks at the edge of the jaw, or for any reason due to faulty operation the result falls markedly below the general average, the result shall be disregarded, another specimen taken from the same threads, and the result of this break included in the average.

WEIGHT PER SQUARE YARD

METHOD NO. 1. — Take one yard of the sample. Weigh, and if the width is not one yard, calculate the weight per square yard.

$$\frac{\text{Weight of linear yard} \times 36}{\text{Width}} = \text{Weight of square yard.}$$

Average two tests.

METHOD NO. 2. — Take a measured portion of the material and weigh. Calculate from this area the weight per square yard.

$$\frac{1296 \times \text{weight of known area}}{\text{Area in inches}} = \text{Weight per square yard.}$$

Average three tests.

METHOD NO. 3. — Cut from the sample a specimen 2 x 2 inches, using a steel die. No specimen for testing shall be taken less than 8 inches from either selvage. Weigh on a torsion balance, adjusted to read the weight of the material in ounces per square yard.

Average three to five tests.

WEIGHT PER LINEAR YARD

The weight per linear yard shall be computed from the weight per square yard, as follows:

$$\frac{\text{Weight per square yard} \times \text{width}}{36} = \text{Weight per linear yard.}$$

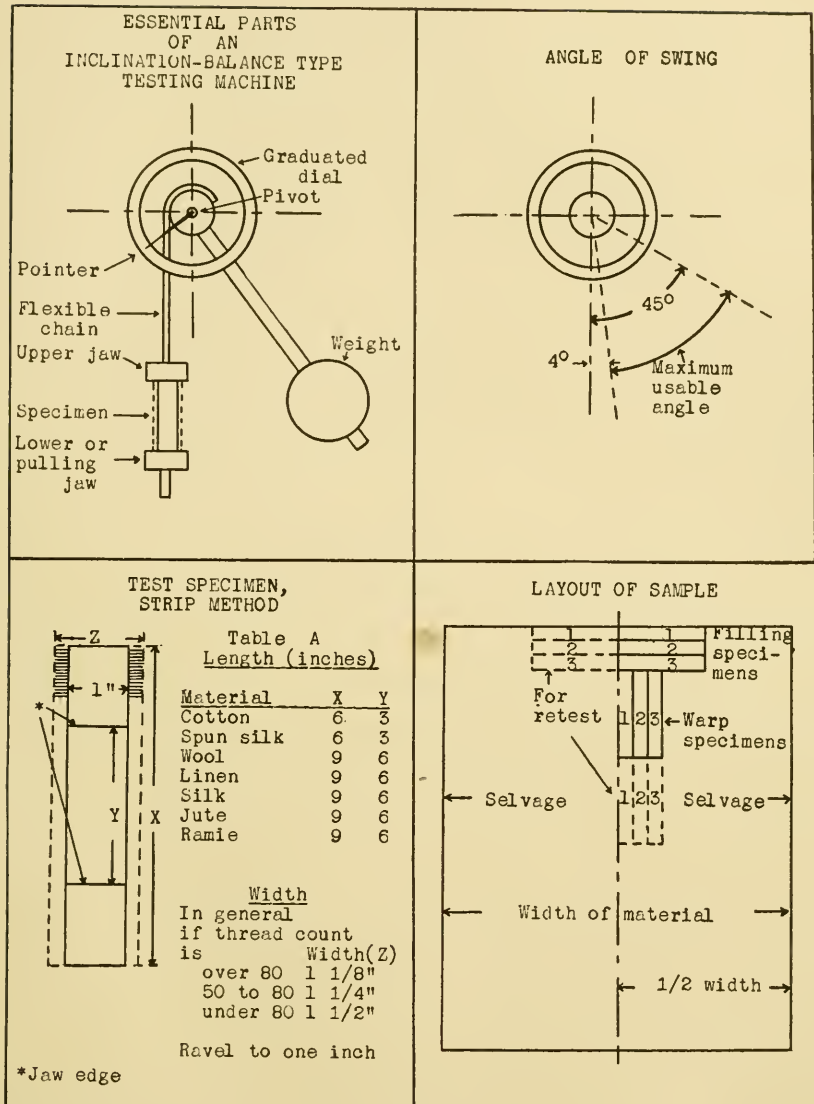


FIG. 1

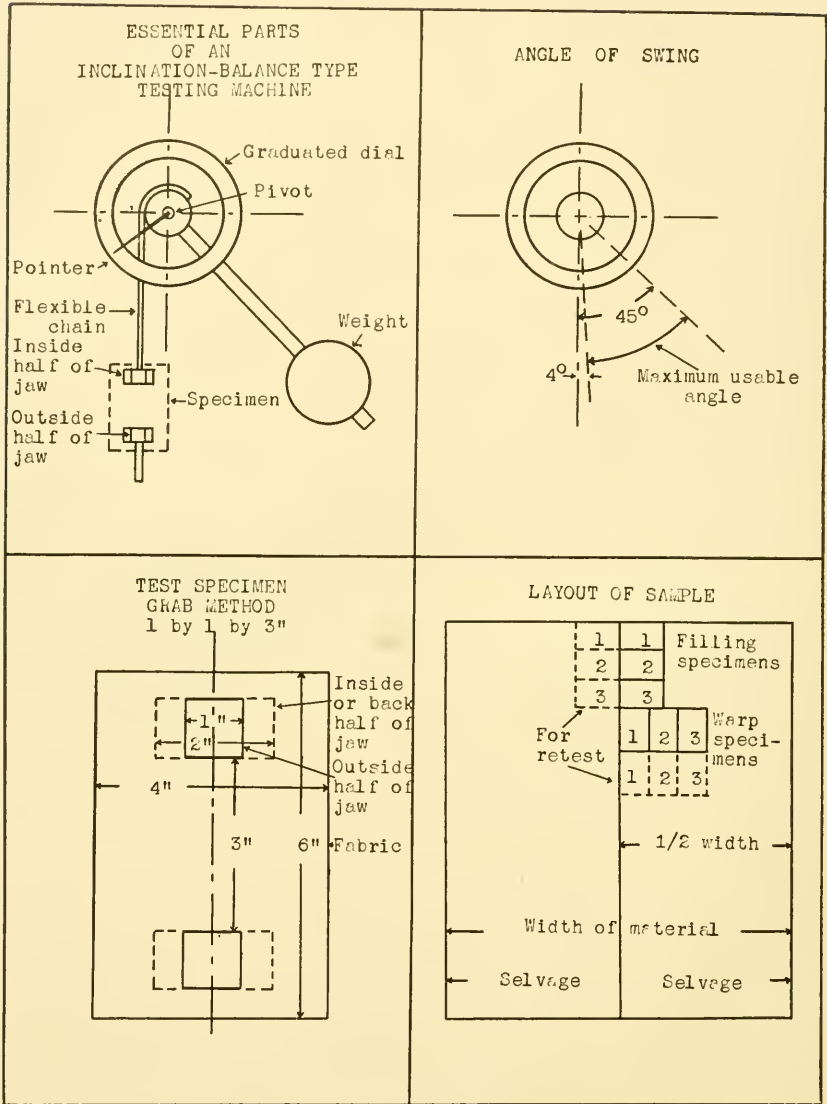


FIG. 2

THREAD COUNT

The actual number of threads in 1 inch of width shall be counted in each direction at three different places in the cloth, and the results averaged for each direction. Where the thread count is under 50 the actual number of threads in 3 inches shall be counted for each direction at three different places in the cloth and the results reduced to threads per inch and averaged for each direction.

When the size of the sample permits, these counts shall be taken about 6 inches apart. No warp reading shall be taken at less than 8 inches from the selvage.

WIDTH

The width shall be determined by laying the material on a flat surface without tension, then measuring the distance perpendicular to the length between the selvages to an accuracy of $\frac{1}{16}$ inch. Three measurements shall be taken at different places in the sample and the results averaged.

Yarn Test Methods

Extracts from American Society for Testing Materials Test Methods¹

BREAKING STRENGTH

Two test methods are given, — the skein test and the single strand test. A preferred and alternative method for each test is given. The alternative method can be used where routine testing is done on a large scale. The preferred method should always be used in case of dispute.

SKEIN TEST (PREFERRED METHOD). — A standard skein (120-yard) shall be broken after conditioning of tubes or bobbins selected for test for twelve hours, or of skeins for at least three hours, in an atmosphere of 65 per cent relative humidity and 70° F. (21° C.). An automatic yarn power tester of inclination balance type, the maximum capacity of which shall be determined in accordance with a table of machine specifications, shall be used. The speed of the pulling jaw shall be 12 inches per minute. Any yarn reel having a 1½-yard perimeter may be used in preparing the skeins. For filling-wound yarns or yarns on cones, where the yarn is drawn from the top, a speed of 100 to 300 r. p. m. of reel shall be used. For warp-wound yarns or yarn on parallel tubes, where the yarn is drawn from the side, a speed of 20 to 30 r. p. m. of reel shall be used. On reels that have only one pigtail guide, the tension shall be applied by making one full wrap of the yarn around the guide. On reels using two or more guides, the yarn shall pass straight through the guide on to the reel, the angles of the guides supplying the necessary tension. Judgment must be used in regard to the amount of tension required on yarns having little or a large amount of twist. Three tests from each of four bobbins from every case of yarn shall be made.

SINGLE STRAND TEST (PREFERRED METHOD). — Single strands shall be broken after conditioning the tubes or bobbins for twelve hours in an atmosphere of 65 per cent relative humidity, 70° F. (21° C.). A single strand tester of proper capacity with the jaws set 10 inches between grips and having a speed of pulling jaw of 12 inches per minute shall be used. The average of 4 breaks from each of 10 bobbins shall be the average strength.

PLIED YARNS (PREFERRED METHOD). — Plied yarns, except standard tire cord, shall be subjected to the single strand break after conditioning for twelve hours on spools or tubes selected for test, in an atmosphere of 65 per cent relative humidity and 70° F. (21° C.). Standard tire

¹ For complete Methods of Testing and Tolerances, see American Society for Testing Materials Book of Standards.

cord shall be tested under dry conditions in accordance with the Standard General Methods of Testing Cotton Fabrics of the American Society for Testing Materials.¹ A single strand tester of proper capacity with the jaws set 10 inches between grips and having a speed of pulling jaw of 12 inches per minute shall be used. The average of 4 breaks from each of 10 spools or tubes shall be reported as the average strength.

ALTERNATE METHOD. — Skeins of single strands of yarn, either single or plied, prepared in accordance with previous paragraphs, shall be broken under natural humidity conditions at time of test. The results thus obtained shall be reduced to a common basis of standard moisture regain equal to 7 per cent of the bone-dry weight.

MOISTURE REGAIN DETERMINATION. — To determine moisture regain present in samples, the several skeins shall be weighed collectively, immediately after testing, under natural moisture conditions which obtain at the time of test. The skeins shall then be placed in the basket of an oven at a temperature of 105 to 110° C. (221 to 230° F.) and dried to constant weight. The moisture regain is then computed as the percentage of the dry weight.

CORRECTION TO STANDARD REGAIN. — (a) The following formula shall then be applied, based on the assumption that the standard moisture regain of cotton yarns is 7 per cent of the dry weight; that the actual percentage regain is between the limits of 3 and 7 per cent of the dry weight; and that for 1 per cent of moisture regain there is an increase of 6 per cent in the tensile strength of the yarn.

$$\text{Tensile strength corrected to standard moisture regain} = \frac{(\text{Tensile strength from machine reading}) \times 142}{100 + (6 \times \text{actual percentage regain})}$$

(b) Moisture regain tests shall be made periodically during the hours of testing as the natural humidity conditions are found to vary.

STRENGTH CORRECTION TO SIZE. — The average tensile strength shall be corrected to the specified size as determined in accordance with the following paragraphs, by the following formula:

$$\text{Corrected tensile strength} = \text{Actual average strength} \times \frac{\text{Actual average size}}{\text{Specified size}}$$

SIZE OR YARN NUMBER

SIZE OF SINGLE YARNS (PREFERRED METHOD). — The size of all standard skeins used in the skein strength test shall be determined im-

¹ American Society for Testing Materials, 1921 Book of Standards.

mediately after being broken. In case the single strand test is made, the standard skein shall be prepared for the size determination at the time of the break, and the size determined immediately. The balance to be used in this test shall be accurate to 0.25 per cent of the standard size of the yarn. When the balance does not indicate the size directly, the yarn number or size may be calculated from the formula:

$$\text{Yarn number or size} = \frac{\text{Length in yards of single yarn}}{\text{Weight in grains}} \times \frac{7000 \text{ (grains in 1 pound)}}{840 \text{ (yards of No. 1 cotton yarn per pound)}}$$

SIZE OF PLYED YARNS (PREFERRED METHOD). — In determining the size of plied yarns, the skein shall be prepared in accordance with Table I, and the size shall be determined after conditioning of tubes or spools selected for test for twelve hours, or of skeins for at least three hours, in an atmosphere of 65 per cent relative humidity and 70° F. (21° C.). Any yarn reel having a 1½-yard perimeter may be used in preparing the skeins. For filling-wound yarns or yarn on cones, a speed of 100 to 300 r. p. m. of reel shall be used. For warp-wound yarns or yarn on parallel tubes, a speed of 20 to 30 r. p. m. of reel shall be used. On reels that have only one pigtail guide, the tension shall be applied by making one full wrap of the yarn around the guide. On reels using two or more guides, the yarn shall pass straight through the guides on to the reel, the angles of the guides supplying the necessary tension.

TABLE I

EQUIVALENT SINGLES SIZE	Yards for Size	Conversion Formula	Number of Tests Per Case of Yarn
20's and above	60	$\frac{\text{Size}}{2} = \text{ply size}$	3 from each of 4 spools or tubes
3's to 20's	24	$\frac{\text{Size}}{5} = \text{ply size}$	3 from each of 4 spools or tubes
Below 3's	12	$\frac{\text{Size}}{10} = \text{ply size}$	3 from each of 4 spools or tubes

SIZE OF ALL YARNS (ALTERNATE METHOD). — All yarns used in the alternative method of testing for strength shall be sized under natural humidity conditions at the time of test. Plied yarns shall be prepared in skeins in accordance with Table I. The moisture regain shall then be determined and results corrected to a common basis of standard

moisture regain equal to 7 per cent of the bone-dry weight by means of the formula:

$$\text{Size corrected to standard moisture} = \frac{\text{Size} \times (100 + \text{actual percentage regain})}{107}$$

The average of these tests shall be the average size of case, bale, ball chain or beam warp of yarn.

TWIST

TWIST OF SINGLE YARNS. — No precision method of determining the twist of single yarns has been developed.

TWIST OF PLIED YARNS. — The ply twist in yarns of two or more ply shall be determined on any standard twist counter with jaws set 10 inches apart. The strands shall be clamped in jaws under a definite tension by attaching weights. The tension to be used shall be determined from the formula:

$$\text{Tension, in grams} = \frac{156 (\text{Constant})}{\text{Equivalent singles size}}.$$

The constant of 156 represents a tension which should be placed on yarn or cord to hold it sufficiently taut and still not remove any stretch.

NUMBER OF TESTS. — Three twist tests on each of four packages of yarn from each case shall be made, and the average of these twelve tests shall be the average of the case.

Analysis of Cloth for Tariff Purposes

Treasury Decisions 33823 and 34255

Under the provisions of paragraph 253 the rates of duty are to be ascertained according to the average number of the yarns in the condition in which imported. The length of the yarn is to be counted as equal to the distance covered by it in the cloth, all clipped threads to be measured as if continuous, and all ply yarns to be separated into singles and the count taken of the total singles; any excessive sizing to be removed by boiling or other suitable process. The number of the yarn is the English number of 840 yards to a pound for a No. 1 yarn.

The average number of the yarn may be found without unraveling the fabric, and is the quotient of the division of the total thread length by the weight in the proportion of 840 yards of yarn equaling 1 pound of 7,000 grains or 1 yard of yarn equaling $8\frac{1}{3}$ grains, which is equivalent to a No. 1 yarn.

The following simple formula may be used: Multiply the count of threads per square inch by the number of square inches in the sample used, this product to be multiplied by 100; then divide the product thus obtained by the weight of the sample in grains multiplied by 432. The quotient will give the number of the yarn. For example, take a sample of cotton cloth 4 inches square, which equals 16 square inches, having 28 warp and 28 woof threads, a total of 56 threads to the square inch, and weighing 8.6 grains. The formula applied would be as follows:

$$\frac{56 \times 16 \times 100}{8.6 \times 432} = 24, \text{ the number of the yarn.}$$

The formula may be further simplified by weighing a square yard of said cloth and dividing the number of threads per square inch by $1/300$ of the weight of a square yard in grains.

Samples of all cotton cloth should be forwarded to the United States appraiser at New York on the C. V. R. cards, under the provisions of T. D. 31936. When a square yard or more is available for test the following formula may be used:

$$\frac{\text{Number of threads per square inch} \times 24}{\text{Number of ounces per square yard} \times 35} = \text{Average number of yarn.}$$

An addition of $8\frac{1}{2}$ per cent to be made to bone-dry weight in ascertaining the number of the yarn in cotton cloth.

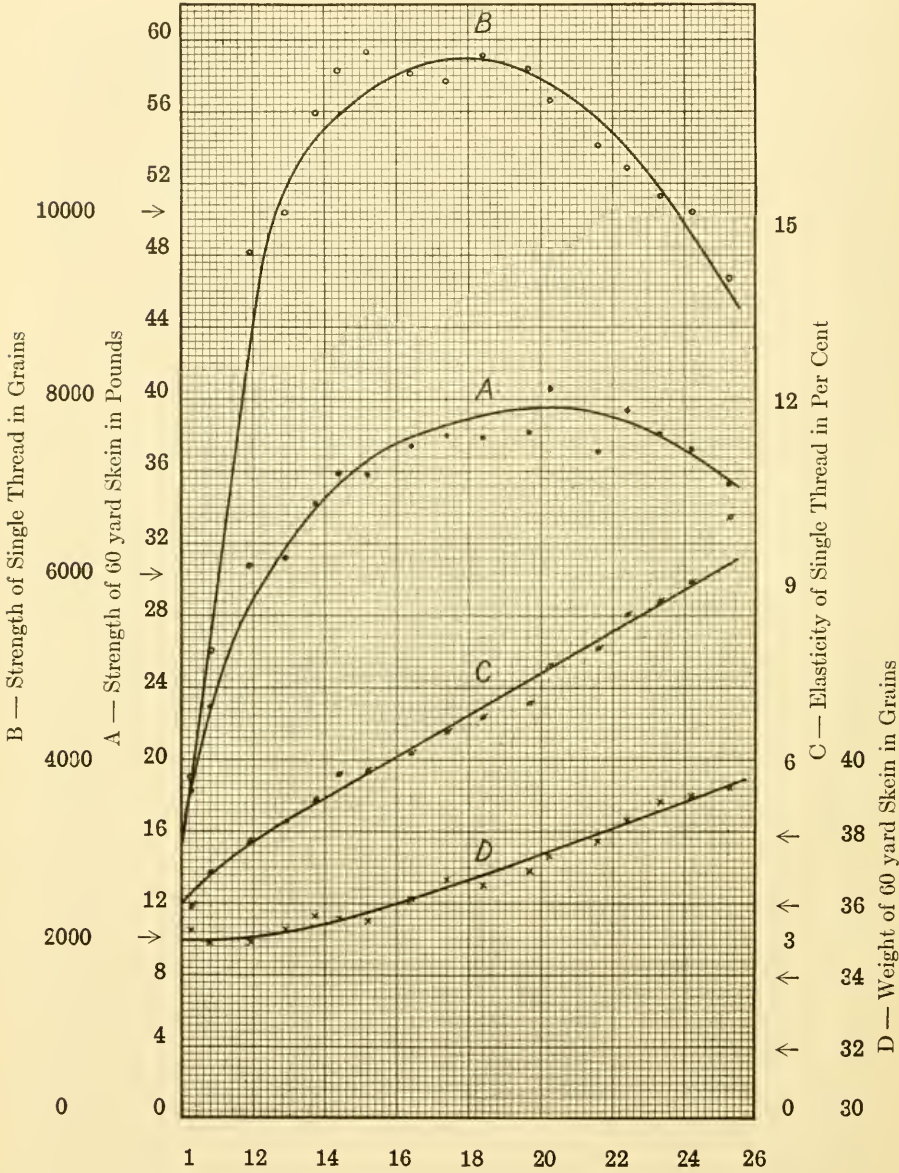
Breaking Weights of American Yarns spun from American Cotton

By George Draper

120 Yards Weight (Grains)	Number of Yarn	OLD	NEW			120 Yards Weight (Grains)	Number of Yarn	OLD	NEW
		Breaking Weight of Warp Yarn	Breaking Weight of Warp Yarn	Breaking Weight Combed Warp	Breaking Weight Soft Twist Yarn			Breaking Weight of Warp Yarn	Breaking Weight of Combed Warp
1,000	1	—	—	—	—	19.6	51	36.6	47—
500	2	—	—	—	—	19.2	52	36.1	46
333.3	3	530	634+	863—	620+	18.9	53	35.5	45+
250	4	410	476—	646	462	18.5	54	34.9	44+
200	5	330	381	516	367	18.2	55	34.4	43+
166.7	6	275	318—	429+	304—	17.9	56	33.8	42+
142.9	7	237.6	272+	367+	258+	17.5	57	33.4	42—
125	8	209	238+	321	224+	17.2	58	32.8	41—
111.1	9	186.5	212+	285—	198+	17	59	32.3	40+
100	10	168.7	191	256	177	16.7	60	31.7	39+
90.9	11	154.1	174—	232+	160—	16.4	61	31.3	39—
83.3	12	142	159+	213—	145+	16.1	62	30.8	38—
76.9	13	131.5	147+	196	133+	15.9	63	30.4	37+
71.4	14	122.8	137—	182—	123—	15.6	64	30	37—
66.7	15	115.1	128—	169+	114—	15.4	65	29.6	36
62.5	16	108.4	120—	158+	106—	15.2	66	29.2	35+
58.8	17	102.5	113—	149—	99—	14.9	67	28.8	35—
55.6	18	97.3	107—	140+	93—	14.7	68	28.5	34+
52.6	19	92.6	101	133—	87	14.5	69	28.2	34—
50	20	88.3	96	126	82	14.3	70	27.8	33+
47.6	21	83.8	91+	120—	77+	14.1	71	27.4	33—
45.5	22	79.7	87+	114+	73+	13.9	72	27.1	32+
43.5	23	75.9	84—	109+	70—	13.7	73	26.8	32—
41.7	24	72.4	80+	104+	66+	13.5	74	26.5	31+
40	25	69.2	77	100	63	13.3	75	26.2	31—
38.5	26	66.3	74+	96	60+	13.2	76	25.8	30+
37	27	63.6	71+	92+	57+	13	77	25.5	30—
35.7	28	61.3	69—	89—	55—	12.8	78	25.3	29+
34.5	29	59.2	67—	86—	53—	12.7	79	24.9	29—
33.3	30	57.3	64+	83—	50+	12.5	80	24.6	28+
32.3	31	55.6	62+	80—	48+	12.4	81	24.3	28—
31.3	32	54	60+	77+	46+	12.2	82	24	28—
30.3	33	52.6	59—	75—	45—	12.1	83	23.7	27+
29.4	34	51.2	57—	72+	43—	11.9	84	23.4	27—
28.6	35	50	55+	70+	41+	11.8	85	23.2	27—
27.8	36	48.7	54—	68+	40—	11.6	86	22.8	26+
27	37	47.6	52+	66+	38+	11.5	87	22.6	26—
26.3	38	46.5	51	64+	37	11.4	88	22.4	26—
25.6	39	45.5	50—	63—	36—	11.2	89	22.2	25+
25	40	44.6	48+	61	34+	11.1	90	22	25—
24.4	41	43.8	47+	59+	33+	11	91	21.7	25—
23.8	42	43	46+	58—	32+	10.9	92	21.5	24+
23.3	43	42.2	45+	56+	31+	10.8	93	21.3	24—
22.7	44	41.4	44+	55+	30+	10.6	94	21.2	24—
22.2	45	40.7	43+	54—	29+	10.5	95	21	23+
21.7	46	40	42+	53—	28+	10.4	96	20.7	23+
21.3	47	39.3	41+	51+	27+	10.3	97	20.5	23—
20.8	48	38.6	41—	50+	27—	10.2	98	20.4	23—
20.4	49	37.9	40—	49+	26—	10.1	99	20.2	22+
20	50	37.3	39	48	25	10	100	20	22

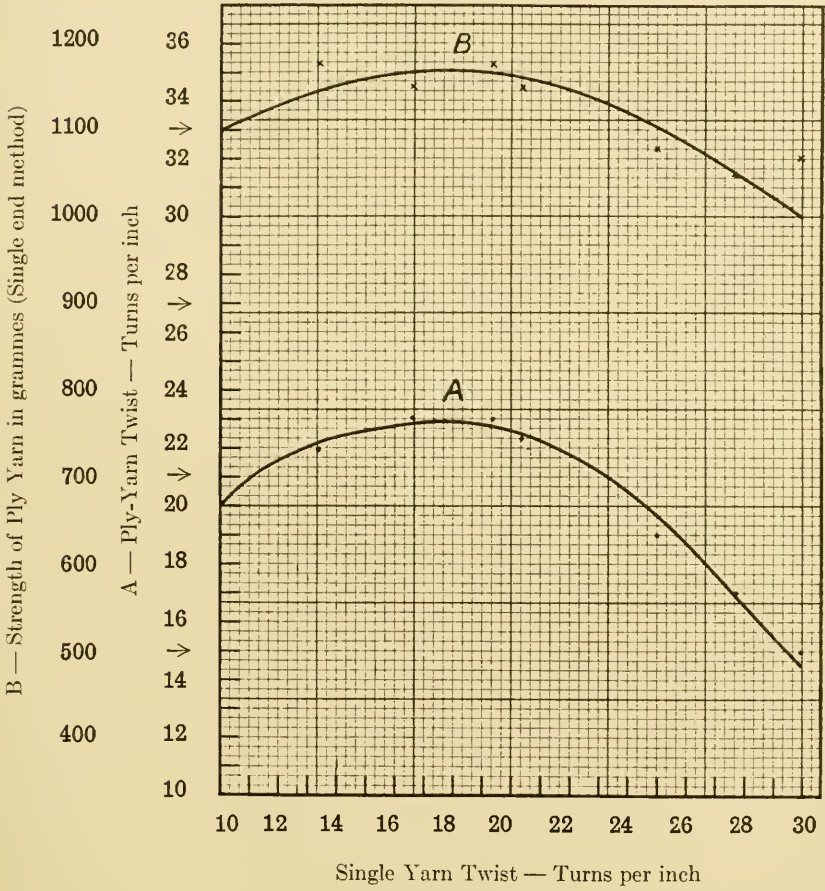
Relation of Strength and Elasticity to Twist in a 13^s Yarn

Courtesy Lowell Textile School



Relation of a 2-Ply 13^s Yarn Strength to Single and Ply Twist

Courtesy Lowell Textile School



Correction Tables for Converting the Apparent Breaking Strength to a 6.5 Per Cent Basis

The "Correction Rates" of strength increase for various fabrics has been computed by Prof. George B. Haven¹ to be as follows:

FABRIC	Weight of Fabric in Ounces per Square Yard at 6 Per Cent Regain	Correction Rate
Cheesecloth	1.54	0.51
Osnaburg	8.10	2.67
Airplane wing fabric	4.00	1.32
Sheeting	5.48	1.81
Tire duck	17.30	5.71
Belt duck	29.10	9.60
Heavy duck	49.34	16.28

Correction tables for three of these fabrics have been made, based on the following formula:

$$\text{Corrected breaking strength} = \frac{\text{Apparent strength} \times [100 + ("X" \times 6.5)]}{100 + ("X" \times \text{actual regain at test})}$$

Where for sheeting X=1.81 for regains between 3 and 9 per cent.

Osnaburg X=2.67 for regains between 3 and 9 per cent.

Tire fabric X=7.0 for regains between 3 and 6.5 per cent.

X=4.0 for regains between 6.5 and 9 per cent.

¹For complete data see National Association of Cotton Manufacturers' Transactions No. 110, pages 117-154.

Correction Table for Converting the Apparent Breaking Strength of Sheeting Weighing Approximately 5.5 Ounces per Square Yard to a 6.5 Per Cent Regain Basis

ACTUAL BREAK	PERCENTAGE OF REGAIN TO DRY WEIGHT												
	3.00	3.50	4.00	4.50	5.00	5.50	6.00	6.50	7.00	7.50	8.00	8.50	9.00
35.0	37.1	36.7	36.5	36.4	35.9	35.6	35.3	35.0	34.7	34.4	34.2	33.9	33.6
37.5	39.8	39.4	39.2	38.8	38.4	38.1	37.8	37.5	37.2	36.9	36.7	36.4	36.1
40.0	42.4	42.0	41.7	41.3	41.0	40.7	40.3	40.0	39.7	39.3	39.1	38.8	38.5
42.5	45.1	44.6	44.3	43.9	43.5	43.2	42.9	42.5	42.2	41.8	41.5	41.2	41.8
45.0	47.7	47.3	46.9	46.5	46.1	45.8	45.4	45.0	44.6	44.3	44.0	43.6	43.3
47.5	50.4	49.8	49.5	49.1	48.7	48.3	47.9	47.5	47.1	46.7	46.4	46.0	45.6
50.0	53.0	52.5	52.1	51.7	51.2	50.9	50.4	50.0	49.6	49.2	48.9	48.5	48.1
52.5	55.6	55.2	54.7	54.3	53.8	53.4	53.0	52.5	52.1	51.6	51.3	50.9	50.4
55.0	58.4	57.8	57.3	56.8	56.3	56.0	55.5	55.0	54.6	54.1	53.8	53.3	52.9
57.5	61.0	60.4	59.9	59.4	58.9	58.5	58.0	57.5	57.0	56.6	56.2	55.8	55.3
60.0	63.6	63.0	62.5	62.0	61.5	61.0	60.6	60.0	59.5	59.0	58.6	58.2	57.6
62.5	66.2	65.6	65.1	64.6	64.1	63.6	63.1	62.5	62.0	61.5	61.1	60.6	60.0
65.0	69.0	68.2	67.8	67.2	66.6	66.1	65.6	65.0	64.5	64.0	63.6	63.0	62.4
67.5	71.6	70.8	70.3	69.8	69.2	68.6	68.1	67.5	67.0	66.4	66.0	65.5	64.8
70.0	74.2	73.4	72.9	72.3	71.8	71.2	70.6	70.0	69.5	68.8	68.4	68.0	67.3
72.5	76.8	76.2	75.5	75.0	74.3	73.8	73.2	72.5	71.9	71.3	70.9	70.3	69.7
75.0	79.6	78.8	78.1	77.5	76.9	76.3	75.6	75.0	74.4	73.7	73.3	72.8	72.1
77.5	82.2	81.4	80.7	80.1	79.4	78.8	78.2	77.5	76.9	76.2	75.7	75.2	74.5
80.0	84.8	84.0	83.3	82.8	82.0	81.4	80.7	80.0	79.4	78.7	78.2	77.6	76.9
82.5	87.4	86.6	86.0	85.3	84.5	83.9	83.2	82.5	81.8	81.1	80.6	80.0	79.3
85.0	90.1	89.2	88.6	87.8	87.2	86.5	85.8	85.0	84.4	83.6	83.1	82.4	81.7

Correction Table for Converting the Apparent Breaking Strength of 30-inch 7-ounce Osaburg to
a 6.5 Per Cent Regain Basis

ACTUAL BREAK	PERCENTAGE OF REGAIN TO DRY WEIGHT												
	3.00	3.50	4.00	4.50	5.00	5.50	6.00	6.50	7.00	7.50	8.00	8.50	9.00
60.0	65.2	64.4	63.6	62.8	62.1	61.4	60.7	60.0	59.2	58.6	58.1	57.3	56.7
62.5	67.8	67.1	66.2	65.4	64.7	63.9	63.2	62.5	61.7	61.0	60.4	59.8	59.1
65.0	70.6	69.8	68.9	68.0	67.2	66.4	65.7	65.0	64.2	63.7	62.9	62.2	61.3
67.5	73.3	72.5	71.6	70.7	69.9	69.0	68.3	67.5	66.7	65.9	65.2	64.5	63.8
70.0	76.0	75.2	74.2	73.3	72.5	71.6	70.8	70.0	69.2	68.4	67.7	66.9	66.2
72.5	78.7	77.9	76.8	75.9	75.0	74.1	73.4	72.5	71.6	70.8	70.2	69.3	68.6
75.0	81.4	80.6	79.5	78.5	77.7	76.8	75.8	75.0	74.0	73.3	72.6	72.7	70.9
77.5	84.2	83.3	82.2	81.1	80.2	79.2	78.3	77.5	76.5	75.7	74.9	74.0	73.3
80.0	86.9	85.9	84.8	83.8	82.8	81.8	80.9	80.0	79.0	78.1	77.4	76.4	75.6
82.5	89.6	88.6	87.5	86.4	85.4	84.4	83.4	82.5	81.5	80.6	79.8	78.9	78.0
85.0	92.2	91.3	90.0	89.0	88.0	87.0	86.0	85.0	84.0	83.0	82.2	81.2	80.3
87.5	95.0	94.0	92.7	91.6	90.6	89.5	88.5	87.5	86.5	85.4	84.6	83.5	82.7
90.0	97.7	96.6	95.4	94.2	93.2	92.0	91.0	90.0	88.8	87.9	87.0	86.0	85.0
92.5	100.4	99.4	98.0	96.9	95.8	94.6	93.5	92.5	91.4	90.3	89.5	88.4	87.4
95.0	103.1	102.0	100.6	99.4	98.4	97.2	96.1	95.0	93.9	92.8	90.0	90.8	89.8

Correction Table for Converting the Apparent Breaking Strength of 17 $\frac{1}{4}$ -Ounce Tire Fabric to a 6.5 Per Cent Regain Basis

ACTUAL BREAK	PERCENTAGE OF REGAIN TO DRY WEIGHT												
	3.00	3.50	4.00	4.50	5.00	5.50	6.00	6.50	7.00	7.50	8.00	8.50	9.00
105	123.7	120.6	117.7	114.9	112.3	109.7	107.3	105.0	103.3	101.7	100.2	98.7	98.3
110	129.6	126.4	123.3	120.4	117.6	115.0	112.4	110.0	108.2	106.4	105.0	103.4	101.9
115	135.5	132.1	128.9	125.9	123.0	120.2	117.5	115.0	113.1	111.5	109.8	108.1	106.5
120	141.4	137.9	134.5	131.0	128.3	125.4	122.6	120.0	118.0	116.3	114.6	112.8	111.1
125	147.3	143.6	140.1	136.8	133.7	130.6	127.8	125.0	122.9	121.2	119.3	117.5	115.8
130	153.1	149.3	145.7	142.3	139.0	135.9	132.9	130.0	127.9	126.0	124.1	122.2	120.4
135	159.0	155.1	151.3	147.8	144.3	141.1	138.0	135.0	132.8	130.8	128.9	126.9	125.1
140	164.9	160.8	156.9	153.2	149.7	146.3	143.1	140.0	137.7	135.7	133.6	131.6	129.7
145	170.8	166.6	162.5	158.7	155.0	151.5	148.2	145.0	142.6	140.5	138.4	136.3	134.3
150	176.7	172.3	168.1	164.2	160.4	156.8	153.3	150.0	147.6	145.4	143.2	141.0	138.9
155	182.6	178.1	173.7	169.6	165.7	162.0	158.4	155.0	153.5	150.2	147.9	145.7	143.6
160	188.5	183.8	179.4	175.1	171.1	167.2	163.5	160.0	158.4	155.0	152.6	150.4	148.3
165	194.4	189.5	185.0	180.6	176.4	172.4	168.6	165.0	163.3	159.9	157.4	155.1	152.9
170	200.3	195.3	190.6	186.1	181.8	177.7	173.7	170.0	168.3	164.7	162.2	159.8	157.5
175	206.1	201.0	196.2	191.5	187.1	182.9	178.9	175.0	172.2	169.6	167.0	164.5	162.2
180	212.0	206.8	201.8	197.0	192.5	188.1	184.0	180.0	177.1	174.4	171.8	169.2	166.8
185	217.9	212.5	207.4	202.5	197.8	193.3	189.1	185.0	182.0	179.2	176.6	173.9	171.4
190	223.8	218.3	213.0	208.0	203.2	198.6	194.2	190.0	186.9	184.1	181.3	178.6	176.1
195	229.7	224.0	218.6	213.4	208.5	203.8	199.3	195.0	191.9	188.9	186.1	183.3	180.7
200	235.6	229.8	224.2	218.9	213.8	209.0	204.4	200.0	196.8	193.8	190.9	188.0	185.3
205	241.5	235.5	229.8	224.4	219.2	214.2	209.5	205.0	201.7	198.6	195.6	192.7	189.9
210	247.4	241.2	235.4	229.8	224.5	219.5	214.6	210.0	206.6	203.4	200.4	197.4	194.6
215	253.3	247.0	241.0	235.3	229.9	224.7	219.7	215.0	211.5	208.3	205.2	202.1	199.2
220	259.2	252.7	246.6	240.8	235.2	229.9	224.9	220.0	216.5	213.1	210.0	206.8	203.8
225	265.1	258.5	252.2	246.3	240.6	235.2	230.0	225.0	221.4	217.9	214.7	211.5	208.4

Correction Table for Converting the Apparent Breaking Strength of 17 $\frac{1}{4}$ -Ounce Tire Fabric to a 6.5 Per Cent Regain Basis — (Continued)

ACTUAL BREAK	PERCENTAGE OF REGAIN TO DRY WEIGHT												
	3.00	3.50	4.00	4.50	5.00	5.50	6.00	6.50	7.00	7.50	8.00	8.50	9.00
230	270.9	264.2	257.8	251.7	245.9	240.4	235.1	230.0	226.3	222.8	219.7	216.2	213.1
235	276.8	270.0	263.4	257.2	251.3	245.6	240.2	235.0	231.3	227.7	224.4	220.9	217.7
240	282.7	275.7	269.0	262.7	256.6	250.8	245.3	240.0	236.2	232.6	229.2	225.6	222.3
245	288.6	281.4	274.6	268.1	262.0	256.1	250.4	245.0	241.2	237.4	234.0	230.3	226.9
250	294.5	287.2	280.1	273.6	267.3	261.3	255.5	250.0	246.1	242.3	238.7	235.0	231.6
255	300.4	292.9	285.8	279.1	272.7	266.5	260.6	255.0	251.0	247.1	243.5	239.7	236.2
260	306.3	298.7	291.5	284.6	278.0	271.7	265.7	260.0	255.9	251.9	248.3	244.4	240.8
265	312.1	304.4	297.1	290.0	283.4	277.0	270.8	265.0	260.8	256.8	253.0	249.1	245.5
270	318.1	310.2	302.6	295.5	288.7	282.2	276.0	270.0	265.7	262.6	257.8	253.8	250.1
275	323.9	315.9	308.3	301.0	294.0	287.4	281.1	275.0	270.6	266.5	262.6	258.5	254.7
280	329.8	321.7	313.9	306.5	299.4	292.6	286.2	280.0	275.6	271.3	267.4	263.2	259.4
285	335.7	327.4	319.5	311.9	304.7	297.9	291.3	285.0	280.5	276.1	272.1	267.9	264.0
290	341.6	333.1	325.1	317.4	310.1	303.1	296.4	290.0	285.4	281.0	276.9	272.6	268.6
295	347.5	338.5	330.7	322.9	315.4	308.3	301.5	295.0	290.4	285.8	281.7	277.3	273.2
300	353.4	344.6	336.3	328.3	320.7	313.5	306.6	300.0	295.3	290.7	286.4	282.0	277.9
305	359.3	350.4	341.9	333.8	326.1	318.8	311.7	305.0	300.2	295.5	291.2	286.7	282.5
310	365.2	356.1	347.5	339.3	331.5	324.0	316.8	310.0	305.1	300.3	296.0	291.4	287.1
315	371.1	361.3	353.1	344.8	336.8	329.2	321.9	315.0	310.0	305.2	300.7	296.1	291.8
320	376.9	367.6	358.7	350.2	342.2	334.4	327.1	320.0	315.0	310.0	305.5	300.8	296.4
325	382.8	373.3	364.3	355.7	347.5	339.7	332.2	325.0	319.9	314.9	310.3	305.5	301.0
330	388.7	379.1	369.9	361.2	352.8	344.9	337.3	330.0	324.8	319.7	315.1	310.2	305.7
335	394.6	384.8	375.5	366.7	358.2	350.1	342.4	335.0	329.7	324.5	319.8	314.9	310.3
340	400.5	390.6	381.1	372.1	363.5	354.5	346.5	338.0	332.6	327.4	322.6	317.6	312.9
345	406.4	396.3	386.7	377.6	368.9	360.6	352.6	344.0	338.6	333.2	328.4	323.4	318.5
350	412.3	402.1	392.3	383.1	374.2	365.8	357.7	350.0	344.5	339.1	334.1	329.0	324.2

Standard List of Wide and Sail Duck

The following table shows a list of ducks approved as standard by the Division of Simplified Practice and the Cotton Duck Association
[Pounds per Yard]

WIDTH (INCHES)	2/0	1/0	1	2	3	4	5	6	7	8	9	10	11	12	WIDTH (INCHES)
22	1.250	1.187	1.125	1.062	1.000	.938	.875	.812	.750	.687	.625	.562	.500	.437	22
24	1.364	1.295	1.227	1.159	1.091	1.023	.956	.886	.818	.750	.682	.614	.545	.477	24
26	—	—	1.329	1.256	1.182	1.108	1.034	.960	.886	.812	.739	.665	.591	.517	26
28	—	—	1.432	1.352	1.273	1.193	1.114	1.034	.955	.875	.795	.716	.636	.557	28
30	—	—	1.534	1.449	1.364	1.278	1.193	1.108	1.023	.937	.852	.767	.682	.597	30
32	—	—	1.636	1.545	1.455	1.364	1.273	1.182	1.091	1.000	.909	.818	.727	.636	32
36	—	—	1.841	1.739	1.636	1.534	1.432	1.330	1.227	1.125	1.023	.920	.818	.716	36
38	—	—	1.943	1.835	1.727	1.619	1.511	1.403	1.295	1.187	1.080	.972	.864	.756	38
40	—	—	2.045	1.932	1.818	1.705	1.591	1.477	1.364	1.250	1.136	1.023	.909	.795	40
42	—	—	2.148	2.028	1.909	1.790	1.670	1.551	1.432	1.312	1.192	1.074	.955	.835	42
44	—	—	2.250	2.125	2.000	1.875	1.750	1.625	1.500	1.375	1.250	1.125	1.000	.875	44
48	—	—	2.454	2.318	2.182	2.045	1.909	1.773	1.636	1.500	1.364	1.227	1.091	.955	48
50	—	—	2.557	2.415	2.273	2.131	1.989	1.847	1.705	1.562	1.420	1.278	1.136	.994	50
54	—	—	2.761	2.608	2.455	2.301	2.148	1.994	1.841	1.687	1.534	1.381	1.227	1.074	54
60	—	—	3.068	2.898	2.727	2.557	2.386	2.216	2.045	1.875	1.705	1.534	1.364	1.193	60
66	—	—	3.375	3.187	3.000	2.812	2.625	2.437	2.250	2.062	1.875	1.687	1.500	1.312	66
72	—	—	3.682	3.477	3.273	3.068	2.864	2.659	2.455	2.250	2.045	1.841	1.636	1.432	72
84	—	—	4.265	4.057	3.818	3.580	3.341	3.102	2.864	2.625	2.386	2.148	1.909	1.670	84
90	—	—	—	—	—	—	3.818	—	—	—	—	—	—	1.790	90
96	—	—	4.909	4.636	4.364	4.091	3.818	3.545	3.273	3.000	2.727	2.455	2.182	1.909	96
102	—	—	—	—	—	4.350	—	3.770	—	—	—	2.610	—	2.028	102
108	—	—	5.522	5.216	4.909	4.602	4.295	3.989	3.682	3.375	3.068	2.761	2.455	3.148	108
112	—	—	—	—	—	4.772	—	3.852	—	—	—	—	—	—	112
120	—	—	6.136	5.796	5.455	5.114	4.773	4.432	4.091	3.750	3.409	3.068	2.727	2.386	120
132	—	—	6.750	6.374	6.000	5.624	5.250	4.874	4.500	4.124	3.750	3.374	3.000	2.624	132
144	—	—	7.364	6.954	6.546	6.136	5.728	5.318	4.910	4.500	4.090	3.682	3.272	2.864	144

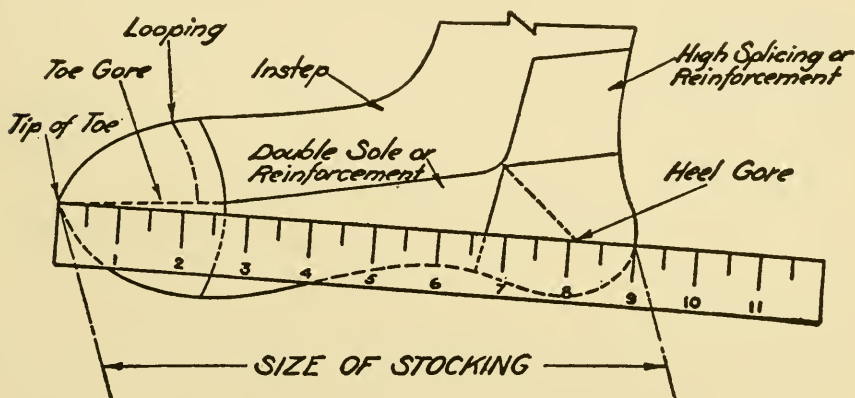
"The numbers in Roman type represent *regular* fabrics; all others, including widths intermediate to those listed, are specials. Only the list of *regular* numbers and widths to be carried in stock. Specials will be made up on order only in units of not less than 500 yards; and as far as possible the manufacture of specials will be restricted to units of 1,500 yards as representing the minimum at which operating efficiency is obtainable."

Standard Measurement of Hosiery Sizes

BUREAU OF STANDARDS CIRCULAR NO. 149

The method of measuring the size of circular knit hosiery may be defined as follows: After the hose has been boarded and pressed and appears in a flat and unwrinkled condition, place a ruler along a line in which the tip of the toe and the bottom of the heel gore are connected. The measured distance along this line from the tip of toe to the intersection with the back of the heel to the nearest half inch is the hosiery size. Preference should be given to the lower number; that is, if the exact measurement, as found by the system, is $10\frac{1}{4}$ inches exactly, it is desirable to call the stocking size 10.

Diagram showing application of ruler between the points selected, denoting size.



Approved method for measuring hosiery

This diagram shows the application of ruler to the hosiery

Standard Size of Bed Blankets

COTTON, WOOL, COTTON AND WOOL MIXED

The following sizes of bed blankets were adopted as standard by the Division of Simplified Practice and representatives of the blanket manufacturers on June 2, 1924:

SIZES IN INCHES			
Width		Length	
54	.	76	66
60	.	76	66
60	.	80	68
60	.	84	70
64	.	76	72
66	.	80	80
			84
			90
			80
			80
			84
			90

Contract Sales Note for Staple Gray Goods

Form approved and adopted by The National Association of Cotton Manufacturers
and American Cotton Manufacturers' Association, 1910

Number

Sold for account of

To

Quantity:

yards (variation not to exceed 2 % allowed)	} Allowable variation in	
pieces of yards each		length of pieces <i>if</i>
bales of yards each		<i>special</i> .

In addition, buyer to take and seller to deliver if made: $\left\{ \begin{array}{l} \% \text{ Seconds @} \\ \% \text{ Tailings at stated contract price if con-} \\ \% \text{ tract is not renewed.} \end{array} \right.$

Quality:

Time of delivery: from date hereof
 during each week, commencing week ending
 during each month, beginning in the month of

Width in inches:

Count per inch: Warp Filling

Weight: $\left\{ \begin{array}{l} \text{No shipment to average} \\ \text{No bale to be over 1\%} \\ \text{No piece to be over 3\%} \end{array} \right\} \left\{ \begin{array}{l} \text{lighter} \\ \text{heavier} \end{array} \right\} \text{ than} \quad \text{Yards to the pound.}$

Price: _____ Cents per yard.

Terms of payment:

Net	days from date of delivery.	
Net	days from date of delivery less	% for payment within
	days from date of delivery.	

Place of delivery:

F. O. B. to carrier at	with	freight allowance.
------------------------	------	--------------------

F. O. B.

Special conditions:

Shipping instructions:

If the production of the seller shall be curtailed during the time above named, by strikes, lockouts, or unavoidable casualties, the deliveries shall be made and accepted in proportion to the production.

The provisions of paragraphs I, II and III, and the allowable variations from specifications as adopted by The American Cotton Manufacturers' Association and The National Association of Cotton Manufacturers, all as printed on the back hereof,¹ are accepted and agreed to as a part of this contract, unless otherwise stated herein.

This sale note is the entire contract between the buyer and seller, and any alteration in or changes from the printed form of this contract must appear on it in writing.

To _____ (Signed)

¹ See following page.

Paragraph I. Passing of Title on Delivery. — Unless otherwise specified, the title to goods sold passes to the buyer (subject to the right of stoppage *in transitu*): —

a. Upon delivery F. O. B. to carrier, consigned to buyer, and thereafter goods are at buyer's risk.

b. Upon arrival of goods at destination and delivery to buyer of bill of lading or of goods, in the case of goods to be delivered F. O. B. elsewhere than to carrier.

c. Upon delivery of indorsed bill of lading or of goods, in the case of goods consigned to seller's order.

d. Upon the separation of the goods and holding subject to buyer's order (the invoice to follow by due course of mail), in the case of goods to be held or if buyer fails to give shipping instructions.

Paragraph II. Storage and Insurance. — Goods invoiced and held subject to buyer's orders shall be at buyer's risk, but covered by fire insurance effected by sellers in reputable companies.

Paragraph III. Rejections and Claims. — The buyer cannot reject the goods for delay in delivery unless he notifies the seller within five business days from receipt of bill of lading, or of invoice if goods are to be held. When contract calls for delivery in instalments, the buyer cannot cancel the contract for any default in any one or more instalments not amounting to a substantial breach of contract, but may cancel or replace at seller's expense any delivery that is delayed.

Buyer cannot reject goods for defects in quality or other like defaults (a) if he cuts or converts them, nor (b) unless he notifies seller within ninety days from receipt by him or at finishing works of goods not held, or within ninety days after date of invoice if goods are invoiced and held; nor (c) unless such defects amount to a substantial breach of contract.

Loss of right to reject does not deprive the buyer of his right to claim damages, if any; but no recovery shall be had on any claim not made within one year from receipt of goods or from date of invoice if goods are held.

Allowable Variations from Contract Specifications.

Width. — The width shall not vary anywhere by more than $\frac{3}{8}$ of an inch below the stipulated width, nor more than $\frac{3}{8}$ of an inch above. The width shall not be uniformly less than the stipulated width, but must, in a majority of places in each piece, be equal to, or greater than, the stipulated width. Goods shall be measured at right angles to the selvages when laid open on a flat, horizontal surface and smoothed out by hand, but not stretched.

Warp Count. — Except within four inches of each selvege, (where exclusive of the selvege, the count must approximate that stipulated) the number of warp threads per inch shall not vary anywhere by more than one thread per inch below the stipulated count, nor by more than two threads per inch above. The number of threads in each piece must equal the stipulated count multiplied by the stipulated width plus the extra threads used in the selvege.

Filling Count. — The number of threads in the filling, or weft, shall not vary anywhere by more than three threads per inch below the stipulated count, nor by more than four above. In the case of sateens, when the count of filling exceeds the count of the warp, the allowance for variation above specified shall be increased by the same percentage that the filling count exceeds that of the warp count. In any case including sateens, the filling count per inch shall not run below the stipulated count throughout the piece, but must, in a majority of places in each piece, equal or be more than, the stipulated count.

Weight. — In case of controversy regarding the weight of goods, decision shall be based on goods which have been exposed for twenty-four hours to normal atmospheric conditions approximating a temperature of 70 degrees F. and a humidity of 70 per cent.

Thrown Silk Rules to govern Transactions between Buyers and Sellers in the United States of America

Taken from Rules published by the Silk Association of America

ARTICLE I

General

SECTION 1. Nothing in the following rules shall be construed as waiving the right in individual transactions to make any special contrary agreement, but the rules shall govern in cases where no such special contract exists. . . .

ARTICLE II

Sales

SECTION 1. Sales of specified or identifiable lots of thrown silk, either from stock or for future delivery are cancelled by destruction or loss of such silks by fire, flood or any other causes beyond control of Seller, prior to delivery dates as called for by the contract. . . .

ARTICLE III

Deliveries

SECTION 1. Sales for delivery on a given date, demand delivery on the date specified. . . .

ARTICLE IV

Weights

SECTION 1. In the absence of stipulation as to weight, invoice weight at time of delivery or readiness to deliver at point of shipment shall apply, provided the weight does not exceed conditioned weight on European silks, conditioned weight plus 2% on all other silks, except Tsatlee Rereels, Haining Rereels, Native China Rereels, and other similar silks, which shall be conditioned weight plus 2½%. . . .

ARTICLE V

Boil-Off

SECTION 1. Boil-off percentage stipulations on all kinds of thrown silk are entirely a matter of mutual agreement between Buyer and Seller. . . .

ARTICLE VI

Twist

SECTION 1. In the absence of any twist stipulations, the following turns per inch shall govern all sales of thrown silks made from 13/15 and/or 14/16 denier raw silk:

2-thread Organzine, 16 first time, 14 second time	
3-thread Organzine, 16 first time, 12 second time	
Tram	2½ to 3½
2-thread Georgette Crêpe	65 to 70
Ordinary Crêpes	60 to 65

In the case of all other classes of thrown silk, the twist must be stipulated in contract. . . .

ARTICLE VII

Drammage

SECTION 1. In case of stipulated drammage, the variation above or below the average stated must not exceed 3%. In the case of silks like Tsatlee Rereels, Haining Rereels, Tussah and other similar grades, variation must be by special agreement between Buyer and Seller. . . .

ARTICLE VIII

Length of Skeins

SECTION 1. In the absence of stated length of skeins, the following will apply:

2-thread Organzine	. . .	20,000 yards
3-thread Organzine	. . .	10,000 yards
2-thread Tram	. . .	15,000 yards
3-thread Tram	. . .	10,000 yards
4-thread Tram	. . .	7,500 yards
5-thread Tram	. . .	5,000 yards

The above lengths will apply on thrown silk made from 13/15 and/or 14/16 denier, European, Japan, Canton and China Filature Silks only. On all other grades of thrown silk delivered in skeins, the length is optional with Seller unless stipulated in contract. . . .

ARTICLE IX

Responsibility of Buyer and Seller

SECTION 1. The Seller is under obligation to deliver thrown silks of contract quality, size, weight, etc., as defined in these rules. The Buyer is equally under obligation to examine and test the silk received or tendered for delivery under contract and promptly pass upon its quality, size, weight, etc., and its compliance with the contract. . . .

ARTICLE X

Selling Terms

SECTION 1. The rate of discount on thrown silk is 6 per cent per annum. . . .

ARTICLE XI

General Terms

SECTION 1. All prices are understood to be F. O. B. Seller's shipping point. . . .



OFFICERS AND MEMBERS OF THE ASSOCIATION

OFFICERS OF THE ASSOCIATION FROM THE FIRST ORGANIZATION

PRESIDENTS

EZEKIEL A. STRAW	. 1865-78	DAVID M. THOMPSON	. 1900-01
AMOS D. LOCKWOOD	. 1878-80	CHARLES H. FISH	. 1901-03
JOHN KILBURN	. 1880-83	HERBERT E. WALMSLEY	. 1903-05
WILLIAM C. LOVERING	. 1883-85	JAMES R. MACCOLL	. 1905-07
RICHARD GARSED	. 1885-86	WM. D. HARTSHORNE	. 1907-08
JOSEPH S. LUDLAM	. 1886-88	CHARLES T. PLUNKETT	. 1908-10
HENRY F. LIPPITT	. 1888-89	FRANKLIN W. HOBBS	. 1910-12
WALTER E. PARKER	. 1889-92	EDWIN F. GREENE	. 1912-14
ROBERT McARTHUR	. 1892-94	ALBERT G. DUNCAN	. 1914-16
EDWARD W. THOMAS	. 1894-95	ALBERT FARWELL BEMIS	. 1916-18
ALFRED M. GOODALE	. 1895-96	W. FRANK SHOVE	. 1918-20
ARTHUR H. LOWE	. 1896-97	RUSSELL B. LOWE	. 1920-22
RUSSELL W. EATON	. 1897-98	ROBERT AMORY	. 1922-24
STEPHEN A. KNIGHT	. 1898-99	MORGAN BUTLER	. 1924-25
FREDERICK E. CLARKE	. 1899-99	WILLIAM B. MACCOLL	. 1925-

VICE PRESIDENTS

WILLIAM A. BURKE	. 1865-73	ALFRED E. ADAMS	. 1902-03
AMOS D. LOCKWOOD	. 1865-77	JAMES R. MACCOLL	. 1903-05
JOHN C. PALFREY	. 1873-76	WM. D. HARTSHORNE	. 1903-07
EDWARD ATKINSON	. 1876-78	GEORGE A. AYER	. 1905-07
A. G. CUMNOCK	. 1877-80	CHARLES T. PLUNKETT	. 1907-08
CHARLES NOURSE	. 1878-81	GEORGE OTIS DRAPER	. 1907-11
WILLIAM F. GOULDING	. 1880-83	FRANKLIN W. HOBBS	. 1908-10
RICHARD GARSED	. 1881-85	EDWIN F. GREENE	. 1910-12
JOSEPH S. LUDLAM	. 1883-86	FREDERICK A. FLATHER	. 1911-13
WALTER E. PARKER	. 1885-89	GEORGE P. GRANT, JR.	. 1912-14
RICHARD B. BORDEN	. 1886-88	ALBERT G. DUNCAN	. 1913-14
ARNOLD B. SANFORD	. 1888-91	WILLIAM M. BUTLER	. 1914-16
ROBERT McARTHUR	. 1889-92	GROSVENOR ELY	. 1914-16
SIMEON B. CHASE	. 1891-93	W. FRANK SHOVE	. 1916-18
EDWARD W. THOMAS	. 1892-94	RUSSELL B. LOWE	. 1916-20
ALFRED M. GOODALE	. 1893-95	JAMES THOMSON	. 1918-22
WILLIAM J. KENT	. 1894-97	ROBERT AMORY	. 1920-22
FRED C. McDUFFIE	. 1895-00	NATHAN DUFFEE	. 1922-24
HENRY T. WHITIN	. 1897-00	JOHN SKINNER	. 1922-24
CHAS. H. RICHARDSON	. 1900-01	RUSSELL H. LEONARD	. 1924-
GEORGE H. HILLS	. 1900-02	JOHN A. SWEETSER	. 1924-
HERBERT E. WALMSLEY	. 1901-03		

DIRECTORS

DANIEL D. CROMBIE .	1865-68	RUSSELL W. EATON .	1896-97
JONES S. DAVIS .	1865-69	GEORGE H. HILLS .	1897-00
WILLIAM P. HAINES .	1865-69	CHAS. H. RICHARDSON .	1897-00
PHINEAS ADAMS .	1865-74	JOHN T. MEATS .	1898-01
THOMAS J. BORDEN .	1865-78	GEORGE F. WHITTEN .	1898-04
CHARLES NOURSE .	1865-78	ALFRED E. ADAMS .	1899-02
A. M. WADE .	1868-69	A. TENNY WHITE .	1899-02
DAVID J. JOHNSTON .	1869-70	CHARLES H. FISH .	1900-01
FREDERICK E. CLARKE .	1869-75	HERBERT E. WALMSLEY	1900-01
A. G. CUMNOCK .	1869-77	WM. D. HARTSHORNE .	1901-03
JOHN KILBURN .	1870-80	JAMES R. MACCOLL .	1901-03
WILLIAM P. HAINES .	1874-78	W. B. SMITH WHALEY .	1901-04
CYRUS I. BARKER .	1875-80	JAMES R. MONTGOMERY	1902-05
HERVEY KENT .	1877-81	WM. D. PENNELL .	1902-05
WALTER PAINE, 3d .	1878-80	PHILIP A. MATHEWSON	1903-06
DAVID J. JOHNSTON .	1878-82	GEORGE P. GRANT, Jr.	1903-12
CHAS. L. LOVERING .	1878-83	GEORGE A. AYER .	1904-05
RICHARD Garsed .	1880-81	C. P. BROOKS .	1904-07
WILLIAM H. JENNINGS .	1880-83	CHARLES T. PLUNKETT	1905-07
JOHN W. DANIELSON .	1881-85	ROSCOE S. MILLIKEN .	1905-08
WALTER E. PARKER .	1881-85	WILLIAM H. LOFTUS .	1905-10
WILLIAM E. BARROWS	1882-83	GEORGE OTIS DRAPER .	1906-07
CHAS. D. McDUFFIE .	1883-83	FRANKLIN W. HOBBS .	1906-08
RICHARD B. BORDEN .	1883-86	HENRY F. MANSFIELD .	1906-10
RUFUS A. MAXFIELD .	1883-86	ROBERT BEATTY .	1906-11
GEORGE W. WEEKS .	1883-86	EDWIN F. GREENE .	1907-10
HENRY S. HOWE .	1883-87	JOHN W. KNOWLES .	1907-10
HENRY F. LIPPITT .	1885-88	FREDERICK A. FLATHER	1907-11
O. S. BROWN .	1885-91	JOSEPH MERRIAM .	1908-11
WILBUR A. STILES .	1886-88	DAVID S. JOHNSTON .	1908-12
ROBERT McARTHUR .	1886-89	FREDERICK B. MACY .	1910-14
STEPHEN N. BOURNE .	1886-91	ALBERT FARWELL BEMIS	1910-16
S. S. SPENCER .	1887-90	RUSSELL B. LOWE .	1910-16
EDWARD W. THOMAS .	1888-92	R. M. MILLER, Jr. .	1910-17
WILLIAM W. WHITIN .	1888-93	WILLIAM AMORY .	1911-14
ROBERT R. SMITH .	1889-92	W. FRANK SHOVE .	1911-16
ALFRED M. GOODALE .	1890-93	WILLIAM N. KIMBALL .	1911-17
HERMAN F. STRAW .	1891-93	ALBERT G. DUNCAN .	1912-13
WILLIAM J. KENT .	1891-94	WILLIAM M. BUTLER .	1912-14
FRED C. McDUFFIE .	1892-95	GROSVENOR ELY .	1913-14
GEORGE W. BEAN .	1892-95	WILLIAM A. MITCHELL	1914-17
FRANK M. MESSENGER	1893-95	ALEXANDER MAKEPEACE	1914-18
ALBERT F. KNIGHT .	1893-99	JOHN SULLIVAN .	1914-18
ARTHUR H. LOWE .	1894-96	PHILIP DANA .	1914-20
HENRY T. WHITIN .	1894-97	HERBERT LYMAN .	1916-19
HERBERT L. PRATT .	1895-98	P. Y. DeNORMANDIE .	1916-19
STEPHEN A. KNIGHT .	1895-98	JOHN E. ROUSMANIERE	1916-22
JOHN ECCLES .	1895-99	WILLIAM B. MACCOLL	1917-18

THOMAS H. RENNIE	1917-19	B. H. BRISTOW DRAPER	1922-24
CHARLES L. GILLILAND	1917-20	JOHN A. PERKINS	1922-
ALBERT BLUM	1918-20	JAMES THOMSON	1922-25
FREDERICK L. JENCKES	1918-21	ARTHUR R. DICKINSON	1923-25
JOHN SKINNER	1918-22	R. H. I. GODDARD	1923-25
J. ARTHUR ATWOOD	1918-24	RUSSELL H. LEONARD	1923-24
CHARLES B. CHASE	1918-23	JOHN A. SWEETSER	1923-24
LEWIS DEXTER	1918-23	ANDREW S. WEBB	1923-
GROSVENOR ELY	1918-23	C. F. BROUGHTON	1923-
CHARLES M. HOLMES	1918-24	ALBERT G. MASON	1924-
WILLIAM L. LYALL	1918-23	W. S. PEPPERELL	1924-
JOHN E. MCLOUGHLIN	1919-22	W. IRVING BULLARD	1924-
MORGAN BUTLER	1919-24	JOHN L. BURTON	1924-
A. W. DIMICK	1919-24	JOHN S. LAWRENCE	1924-
NATHAN DUFEE	1920-22	JAMES SINCLAIR	1924-
SAMUEL STEWART	1920-23	E. KENT SWIFT	1924-
E. KENT SWIFT	1920-23	WILLIAM B. MACCOLL	1925-25
ALLEN F. JOHNSON	1921-22	S. HAROLD GREENE	1925-
ALFRED E. COLBY	1922-	JAMES O. THOMPSON, JR.	1925-
PHILIP DANA	1922-	DEXTER STEVENS	1925-

AUDITORS

BENJAMIN SAUNDERS	1865-71	C. E. ROBERTS	1900-16
JOHN C. PALFREY	1871-73	BOYDEN & STEACIE	1916-19
HENRY D. SULLIVAN	1873-82	F. W. LAFRENTZ & Co.	1919-
J. HERBERT SAWYER	1882-00		

SECRETARY AND TREASURER

AMBROSE EASTMAN	1865-94	C. J. H. WOODBURY	1894-15
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SECRETARY

TREASURER

C. J. H. WOODBURY	1915-16	CHARLES H. FISH	1915-16
-----------------------------	---------	---------------------------	---------

SECRETARY AND TREASURER

CHARLES H. FISH, 1916-17

SECRETARY

TREASURER

RUFUS R. WILSON	1917-21	HERBERT LYMAN	1917-18
HARRY C. MESERVE	1921-25	W. IRVING BULLARD	1918-
RUSSELL T. FISHER	1925-		

ALPHABETICAL LIST OF MEMBERS

HONORARY, LIFE, ACTIVE, ASSOCIATE, TECHNICAL, AND
SUSTAINING

ALSO SUSTAINING REPRESENTATIVES

AS OF JULY 1, 1926

Hon. — Honorary	As. — Associate
L. — Life	Tech. — Technical
Ac. — Active	Sus. — Sustaining
S.R. — Sustaining Representatives.	

		Elected
Abercrombie, James H.	Ac.	Apr. 25, 1907
"Rutland," Dorking Rd., Reigate, Surrey, Eng.		
Aberfoyle Mfg. Co.	Sus.	May 22, 1917
Charles L. Gilliland, Treas., Chester, Pa.		
Acushnet Mill Corp.	Sus.	Nov. 21, 1918
Robert A. Bartlett, Treas., New Bedford, Mass.		
Adam, Alexander E.	Ac.	Apr. 30, 1909
Mgr. Canadian Cottons, Ltd., 429 James St., Hamilton, Ontario, Can.		
Adams, George B.	Ac.	Apr. 30, 1909
Treas. Adams Brothers Mfg. Co., Adams, Mass.		
Adams, Henry Shaw	Ac.	Oct. 4, 1907
Sec.-Treas. The Springstein Mills, P. O. Box 442, Chester, S. C.		
Adams, Robert J.	Ac.	Oct. 19, 1923
Pres. Adams Mfg. Co., 31-33 East 32d St., New York City.		
Aldrich Brothers Co.	Sus.	Jan. 24, 1919
Charles T. Aldrich, Treas., Moosup, Conn.		
Aldrich, Charles T.	Ac.	Apr. 28, 1886
Treas. Aldrich Brothers Co., P. O. Box 1134, Providence, R. I.		
Algeo, Bradley C.	Ac.	Sept. 21, 1905
Philadelphia Textile School, 320 So. Broad St., Philadelphia, Pa.		
Algonquin Printing Co.	Sus.	Nov. 1, 1918
William H. Jennings, Treas., Fall River, Mass.		
Allen, Fred	Ac.	June 5, 1925
Asst. Mgr. The Textile Development Co., 80 Federal St., Boston, Mass.		
Allen, G. Bion	Ac.	Apr. 27, 1905
Managing Director J. & P. Coats (R. I.), Inc., 117 Mulberry St., Pawtucket, R. I.		
Allen, John E.	Tech.	Apr. 16, 1926
The Textile Development Co., 80 Federal St., Boston, Mass.		
Allen, Lewis F.	As.	Apr. 28, 1910
Treas. Dinsmore Mfg. Co., Salem, Mass.		
Allen, Warner M.	S.R.	May 11, 1917
Parkhill Mfg. Co., Fitchburg, Mass.		
Almy, John T.	Ac.	Apr. 28, 1910
Treas. Attawaugan Co., Norwich, Conn.		
American Mfg. Co.	Sus.	Nov. 1, 1917
Francis Lynch, Agent, Victory Mills, N. Y.		

		Elected	
American Printing Co.	Nathan Durfee, Asst. Treas., Fall River, Mass.	Sus.	Jan. 7, 1918
Ames, Allan W.	Bankers Trust Co., 16 Wall St., New York City.	As.	May 1, 1924
Ames, John Ormsbee	Goddard Brothers, 50 So. Main St., Providence, R. I.	{ L.	Sept. 21, 1900 Sept. 21, 1905
Amory, Browne & Co.	Robert Amory, Boston Mass.,	Sus.	Sept. 18, 1917
Amory, Frederick	Nashua Mfg. Co., Nashua, N. H.	S.R.	Aug. 11, 1917
Amory, Robert	Amory, Browne & Co., Boston, Mass.	S.R.	Sept. 18, 1917
Anderson, Clayton & Co.	John Hopkins, Houston, Tex.	Sus.	June 1, 1923
Anderson, Thomas T.	Treas. Solway Dyeing & Textile Company, Pawtucket, R. I.	Ac.	Apr. 16, 1926
Anderson, Will B.	Mgr. Barber-Colman Co., Framingham, Mass.	As.	May 3, 1918
Anderson, William D.	Pres. Bibb Mfg. Co., Macon, Ga.	Ac.	Apr. 29, 1915
Andres, Eugen C.,	Eugen C. Andres Co., 20 Central St., Boston, Mass.	As.	Oct. 18, 1900
Andres, Frederick H.	Treas. Frederick H. Andres, Inc., 45 Milk St., Boston, Mass.	As.	Sept. 30, 1914
Andrews, Harold B.	J. P. Rhodes Company, Providence, R. I.	As.	Apr. 16, 1926
Androscoggin Mills	Chas. E. Inches, Treas., Lewiston, Me.	Sus.	July 23, 1917
Appleton, William C., Jr.	The Viscose Company, Providence, R. I.	As.	June 14, 1926
Arkwright Mills	J. Edward Newton, Treas., Fall River, Mass.	Sus.	Sept. 10, 1918
Armitage, Joshua D.	Taylor, Armitage & Eagles, Inc., 120 Broadway, New York City.	Ac.	Apr. 26, 1906
Arnold, E. H.	Asst. Treas. Greylock Mills, North Adams, Mass.	Ac.	May 4, 1920
Ashland Cotton Co.	Grosvenor Ely, Treas., Jewett City, Conn.	Sus.	May 12, 1917
Ashley, Charles S., Jr.	Charles S. Ashley & Sons, 11-15 North Sixth St., New Bedford, Mass.	As.	June 2, 1922
Ashworth, Henry	Ashworth Brothers, Inc., P. O. Box 776, Fall River, Mass.	As.	Apr. 28, 1897
Aspden, Thomas	Canadian-Connecticut Cotton Mills, Sherbrooke, Quebec, Can.	As.	May 5, 1922
Atkinson, E. W.	Atkinson, Haserick & Co., 152 Congress St., Boston, Mass.	Ac.	Oct. 27, 1886
Attawaugan Co.	Calvin H. Frisbee, Pres., Killingly, Conn.	Sus.	July 20, 1918
Atteaux, Frederick E.	Pres. Frederick E. Atteaux & Co., Inc., 176 Purchase St., Boston, Mass.	As.	Apr. 26, 1917

		Elected
Atwood, J. Arthur	Treas. Ponemah Mills, 930 Hospital Trust Bldg., Providence, R. I.	Ac. Oct. 28, 1891
Ayer, Frederick	Pres. Tremont & Suffolk Mills, 141 Milk St., Boston, Mass.	Ac. May 1, 1924
Ayer, George A.	3 Morgan Ter., New Bedford, Mass.	Ac. Apr. 24, 1895
Ayer, Nathaniel F.	Treas. Nyanza Mills, 77 Franklin St., Boston, Mass.	Ac. Apr. 25, 1901
Babcock, Frederick L.	Editor, Wade Publishing Co., The, Cambridge, Mass.	S.R. Apr. 6, 1922
Baetjer, Howard	Pres. Mt. Vernon-Woodberry Mills, 506 Continental Bldg., Baltimore, Md.	Ac. May 3, 1918
Bailey, C. E.	Manager, Franklin Weaving Company, Box, 94, Franklin, Mass.	Ac. Apr. 6, 1925
Bailey, Harry L.	Wellington, Sears & Co., 93 Franklin St., Boston, Mass.	Ac. Oct. 2, 1913
Bailey, Joseph W.	Gen. Mgr. Butler Mill, New Bedford, Mass.	Ac. Apr. 23, 1903
Baldwin, James	Asst. to Treas. Lorraine Mfg. Company, Pawtucket, R. I.	As. June 14, 1926
Baldwin, Luther C.	Pres. U. S. Bobbin & Shuttle Co., 57 Eddy St., Providence, R. I.	As. Sept. 17, 1910
Ballard, Joseph W.	Treas. Griswoldville Mfg. Co., Griswoldville, Mass.	S.R. Jan. 21, 1918
Ballard, Walter C.	Treas. Katama Mills, 78 Chauncy St., Boston, Mass.	Ac. Oct. 20, 1917
Ballou, Roland H.	Vice Pres. Connecticut Mills Co., 736 Hospital Trust Bldg., Providence, R. I.	Ac. Sept. 16, 1916
Balmer, John T.	Supt. Merchants Mfg. Company, Fall River, Mass.	Ac. June 5, 1925
Bancroft, John, Jr.	Sales Mgr. Joseph Bancroft Sons Co., 320 Broadway, New York City.	Ac. Aug. 3, 1921
Bannon, John F.	Pres. Mansfield Bleachery, Barrowsville, Mass.	Ac. May 3, 1918
Barber-Colman Co.	Howard D. Colman, Pres., Rockford, Ill.	Sus. Sept. 10, 1917
Barnard Mfg. Co.	J. Edward Newton, Treas., Fall River, Mass.	Sus. Nov. 1, 1918
Barnefield, Harold C.	Waypoysset Mfg. Co., Central Falls, R. I.	S.R. Jan. 28, 1919
Barnes, Joel M.	Barnes Textile Service Co., 101 Milk St., Boston, Mass.	As. Sept. 29, 1911
Barnum, George S.	Pres. & Treas. The Bigelow Co., New Haven, Conn.	As. Apr. 24, 1895
Barnwell, Elliot H.	Pres. Barnwell & Co., 313 Ohio Bldg., Akron, Ohio.	Ac. May 3, 1918
Barr, Walwin	6 Odell St., Yonkers, New York.	As. Apr. 30, 1914

	Elected
Barrell, William L. Treas. Lawrence Duck Co., Lawrence, Mass.	Ac. Apr. 28, 1910
Barrett, D. Emerson Treas. Maverick Mills, 144 Addison St., East Boston, Mass.	Ac. Nov. 23, 1925
Barrows, Allan 420 Acushnet Ave., New Bedford, Mass.	Ac. July 15, 1922
Bartlett, Edwin N. Pres. The Edwin Bartlett Co., North Oxford, Mass.	Ac. Apr. 29, 1891
Bartlett, Robert A. Treas. Acushnet Mill Corp., New Bedford, Mass.	S.R. Nov. 21, 1918
Bassett, C. C. Jr. The Viscose Company, 171 Madison Ave., New York City.	As. Oct. 5, 1923
Batchelder, Nelson A. Empire Cotton Mills, Ltd., Welland, Ontario, Canada.	Ac. Sept. 30, 1914
Bates, Daniel Moore Vice Pres. Day & Zimmermann, Inc., 1600 Walnut St., Philadelphia, Pa.	Ac. Apr. 27, 1898
Bates Mfg. Co. H. deForest Lockwood, Treas., Lewiston, Me.	Sus. Sept. 18, 1917
Bauldry, Lyman C. Dept. Mgr. The Pairpoint Corp., New Bedford, Mass.	As. Apr. 5, 1921
Baylies, Lincoln Amory, Browne & Co., 48 Franklin St., Boston, Mass.	Ac. June 14, 1926
Baylies, Walter C. Amory, Browne & Co., 48 Franklin St., Boston, Mass.	Ac. Oct. 20, 1917
Beacon Mfg. Co. Charles D. Owen, Treas., New Bedford, Mass.	Sus. Nov. 7, 1917
Beal, W. DeFord Cooper & Brush, Inc., 53 State Street, Boston, Mass.	As. May 1, 1924
Bean, Frank A. Asst. Agt. American Mfg. Co., Victory Mills, Victory Mills, N. Y.	Ac. Apr. 6, 1923
Beaver Mills Gurry Ellsworth Huggins, Pres., North Adams, Mass.	Sus. Apr. 9, 1918
Beede, Herbert G. Pres. Fort Dummer Mills, Pawtucket, R. I.	Ac. May 4, 1920
Bell, Colin C. National Vulcanized Fibre Co., Maryland Ave. & Beech St., Wilmington, Del.	As. Apr. 29, 1896
Belland, Harry D. Supt. Dominion Textile Co., Ltd., Dominion Cottons Branch, Kings Pk., Verdun, Quebec, Can.	Ac. Mar. 7, 1924
Bemis, Albert Farwell Chairman, Bemis Bro. Bag Co., 40 Central St., Boston, Mass.	{ Ac. Apr. 23, 1903 { L. Apr. 13, 1911
Bemis Bro. Bag Co. George N. Roberts, Vice Pres., Boston, Mass.	Sus. June 6, 1917
Benjamin, Edward B. Treas. E. V. Benjamin Co., Maginnis Cotton Mills, New Orleans, La.	Ac. May 20, 1919
Bennett, E. Howard American Wool & Cotton Reporter, 530 Atlantic Ave., Boston, Mass.	As. Apr. 30, 1914
Berkshire Cotton Mfg. Co. Charles T. Plunkett, Pres., Adams, Mass.	Sus. May 12, 1917

		Elected	
Berry, Henry Newhall	Richmond Lace Wks., 85 Devonshire St., Boston, Mass.	Ac.	Apr. 30, 1914
Best, Edward H.	Edward H. Best & Co., P. O. Box 2207, Boston, Mass.	As.	Apr. 23, 1903
Billington, L. A.	Agent, Fort Dummer Mills, Brattleboro, Vermont.	Ac.	Apr. 6, 1925
Bishop, Frederick H.	Universal Winding Co., 95 South St., Boston, Mass.	As.	Apr. 26, 1900
Bishop, Robert	Treas. Robert Bishop Mfg. Co., 157 W. Sixth St., So. Boston, Mass.	Ac.	Apr. 26, 1906
Blake, Charles R.	19 Harrison St., Taunton, Mass.	Ac.	Sept. 21, 1905
Blake, Edmund E.	Saco-Lowell Shops, Biddeford, Me.	As.	Oct. 2, 1902
Blake, Francis P.	Bay State Belting Co., 349 Congress St., Boston, Mass.	As.	May 3, 1921
Blanchard, Fessenden S.	Asst. to Treas. Pacific Mills, 24 Federal St., Boston, Mass.	Ac.	Oct. 5, 1920
Blum, Albert	Treas. United Piece Dye Wks., Lodi, N. J.	S.R.	Feb. 12, 1918
Boardman, Richard	Supt. Osborn Mills, Fall River, Mass.	Ac.	Sept. 11, 1912
Bogert, Theodore P.	Sec. Mfrs. Mut. Fire Ins., Co., Providence, R. I.	As.	Apr. 13, 1911
Bolinger, John	Vice Pres. National Shawmut Bank, Boston, Mass.	As.	Dec. 12, 1918
Booth, Joseph W.	Treas. The George E. Kunhardt Corp., Lawrence, Mass.	Ac.	Apr. 25, 1907
Boott Mills	Frederick A. Flather, Treas., Lowell, Mass.	Sus.	July 17, 1917
Borden, Bertram H.	Pres. American Printing Co., P. O. Box 1194, City Hall Sta., New York City.	Ac.	May 3, 1918
Borden, Charles N.	Treas. Richard Borden Mfg. Co., Fall River, Mass.	Ac.	Apr. 25, 1907
Borden, Jefferson, Jr.	Fall River Bleachery, Fall River, Mass.	Ac.	May 3, 1918
Borden, Richard Mfg. Co.	Charles N. Borden, Treas., Fall River, Mass.	Sus.	July 17, 1917
Borden, Spencer, Jr.	Pres. & Treas. Fall River Bleachery, P. O. Box 1, Fall River, Mass.	Ac.	Apr. 27, 1916
Borden, Sydney H.	Treas. Durfee Mills, Fall River, Mass.	Ac.	Sept. 16, 1916
Boston Mfg. Co.	James H. Whitehead, Treas., Waltham, Mass.	Sus.	May 31, 1917
Bourne Mills	George Delano, Treas., Fall River, Mass.	Sus.	May 1, 1920
Bowen, Amos Miller	Treas. U. S. Ring Traveler Co., 159 Aborn St., Providence, R. I.	As.	Apr. 6, 1923
Bowen, Elmer L.	Agt. Appleton Co., Lowell, Mass.	Ac.	Oct. 29, 1918

		Elected
Bowler, Laurence R.	Boston, Mass.	Ac. June 1, 1923
Bowne, Garrett D., Jr.	Westinghouse Elec. & Mfg. Co., 10 High St., Boston, Mass.	As. Apr. 29, 1911
Boyd, George A.	Asst. Treas. Harmony Mills, Cohoes, N. Y.	Ac. Mar. 3, 1920
Boyd, John Schofield	John S. Boyd Co., Water St., Williamstown, Mass.	Ac. Sept. 23, 1909
Boyd, William V.	Mgr. Canadian Cottons, Ltd., Cornwall, Ontario, Can.	Ac. Apr. 26, 1906
Boys, Robert W.	Supt. Cotton Division, Farr Alpaca Company, Holyoke, Mass.	Ac. June 14, 1926
Bradbury, James W.	The Textile Development Co., 80 Federal St., Boston, Mass.	Tech. Apr. 16, 1926
Bradbury, Thomas	Supt. Wamsutta Mills, New Bedford, Mass.	Ac. May 3, 1918
Bradley, Walter H.	Asst. Treas. Hill Mfg. Company, 89 State St., Boston, Mass.	Ac. Apr. 28, 1910
Brady, Chas. E.	Treas. Potomska Mills Corp., New Bedford, Mass.	S.R. Nov. 21, 1918
Brady, Frank A.	Supt. Stevens Mfg. Co., 914 Rock St., Fall River, Mass.	Ac. Oct. 20, 1917
Bradon, Lord & Nagle Co., Inc.	Henry G. Lord, Pres., Boston, Mass.	Sus. Mar. 1, 1918
Brayton, Frank L.	Sales Mgr. Fitchburg Yarn Co., Fitchburg, Mass.	Ac. Nov. 13, 1924
Brayton, Israel	Treas. Lincoln Mfg. Co., Fall River, Mass.	S.R. July 30, 1917
Brierley, Joseph H.	4697 Castor Road, Frankford, Philadelphia, Pa.	Ac. Sept. 21, 1905
Briggs, George T.	Pres. & Gen. Mgr. The Briggs Mfg. Co., Voluntown, Conn.	Ac. Apr. 24, 1902
Brightman, Donald J.	Asst. to Mgr. The Ninigret Co., 32 Central Ave., Pawtucket, R. I.	Ac. June 1, 1923
Brighton Mills	William L. Lyall, Chairman of Board, Passaic, N. J.	Sus. July 25, 1917
Broadbent, James T.	V. P. & Gen. Mgr. Standard Textile Products Co., 320 Broadway, New York City.	Ac. Apr. 28, 1904
Bromley, Ernest	Agt. Waypoysset Mfg. Co., P. O. Box 427, Pawtucket, R. I.	Ac. Apr. 28, 1910
Bromley, Joseph H.	Pres. Quaker Lace Co., Philadelphia, Pa.	Ac. Sept. 21, 1905
Broughton, C. F.	Treas. Wamsutta Mills, New Bedford, Mass.	Ac. Oct. 20, 1917
Brown, Charles N.	Pres. & Treas. The Lincoln Cotton Mill Co., Evansville, Ind.	Ac. Oct. 29, 1918
Brown, Frederick H.	Sales Mgr. Judson Mills, c/o Hunter Mfg. & Comm. Co., 58 Worth St., New York City.	Ac. Sept. 21, 1925

	Elected	
Brown, George G. Treas. The David Brown Co., Foster & Market Sts., Lawrence, Mass.	As.	Dec. 27, 1918
Brown, Henry R. Supt. Hope Co., Phenix Mills, P. O. Box 56, Phenix, R. I.	Ac.	Apr. 28, 1897
Brown, Isaac A. Treas. Narragansett Mills, P. O. Box 842, Fall River, Mass.	Ac.	Sept. 29, 1898
Brown, M. R. Treas. Davol Mills, Fall River, Mass.	S.R.	Aug. 12, 1918
Brown, Stuart F. Agt. Whitinsville Spinning Ring Co., Whitinsville, Mass.	As.	Mar. 2, 1922
Bryant, Fred C. Curtis & Marble Machine Co., 151 Fifth Ave., New York City.	As.	May 1, 1924
Buckley, Charles E. Supt. Gosnold Mills Co., 24 Jenny Lind St., New Bedford, Mass.	Ac.	Apr. 26, 1917
Buckley, William H. Mfg. Agt. The Baltic Mills Co., Baltic, Conn.	Ac.	Apr. 30, 1909
Bucklin, Harris H. Asst. Treas. Interlaken Mills, Phenix, R. I.	S.R.	Oct. 29, 1918
Budlong, Frederick R. Supt. Coventry Co., Anthony, R. I.	Ac.	Apr. 24, 1923
Bullard, W. Irving Vice Pres. The Merchants National Bank, 28 State St., Boston, Mass.	Ac.	Sept. 11, 1912
Burgess, Robert 3 Bradford Court, Newton Centre, Mass.	Ac.	Apr. 27, 1892
Burke, James A. Agt. Lyman Mills, 74 Front St., Holyoke, Mass.	Ac.	Oct. 29, 1918
Burnham, Alfred H. P. O. Box 202, Station F, Baltimore, Md.	Ac.	Apr. 26, 1900
Burnham, Hervey P. O. Box 503, Suncook, N. H.	Ac.	Apr. 27, 1899
Burns, Alfred Asst. Supt. West Boylston Mfg. Co., Easthampton, Mass.	Ac.	Oct. 29, 1918
Burton, John L. Agt. Nashawena Mills, New Bedford, Mass.	Ac.	Apr. 23, 1903
Burton, Harry H. Supt. Mill B., Nashawena Mills, New Bedford, Mass.	Ac.	June 14, 1926
Butler, Arthur Cecil Leigh & Butler, 232 Summer St., Boston, Mass.	As.	Apr. 28, 1904
Butler Mill Morgan Butler, Treas., New Bedford, Mass.	Sus.	Oct. 6, 1921
Butler, Morgan Treas. Butler Mill, 77 Franklin St., Boston, Mass.	Ac.	Apr. 30, 1914
Butler, Obadiah Connecticut Mills Co., Danielson, Conn.	Ac.	Apr. 13, 1906
Butler, William M. Pres. Butler Mill, 77 Franklin St., Boston, Mass.	Ac.	Apr. 28, 1910
Butterworth, Harry W. Pres. H. W. Butterworth & Sons Co., York & Cedar Sts., Philadelphia, Pa.	As.	Oct. 28, 1897

		Elected
Butterworth, H. W., & Sons Co.	Sus.	Sept. 12, 1917
Harry W. Butterworth, Pres., Philadelphia, Pa.		
Butterworth, Samuel T.	Ac.	Sept. 21, 1905
Agt. The Lawton Mills Corp., Plainfield, Conn.		
Buxton, G. Edward, Jr.	Ac.	Apr. 24, 1923
Vice Pres. B. B. & R. Knight, Inc., 715 Hospital Trust Bldg., Providence, R. I.		
Cadwell, William H.	Ac.	Apr. 26, 1900
Agt. Nashua Mfg. Co., Jackson Mill, Nashua, N. H.		
California Cotton Mills Co.	Sus.	Feb. 8, 1921
J. R. Millar, Gen. Mgr., Oakland, Calif.		
Campbell, N. S.	Ac.	Apr. 16, 1926
Treas. National Rhea Co., 1015 Hospital Trust Bldg., Providence, R. I.		
Carpenter, Chester W.	Ac.	May 1, 1924
Agt. John Farnum Co., Lancaster, Pa.		
Carpenter, Frank L.	Ac.	May 3, 1918
Treas. Davis Mills, Fall River, Mass.		
Carpenter, Lewis M.	Ac.	Apr. 7, 1919
Agt. Ashland Cotton Co., Jewett City, Conn.		
Cartledge, Francis J.	Ac.	Nov. 10, 1922
Supt. Ipswich Mills, Ipswich, Mass.		
Catterall, John	Ac.	Apr. 16, 1926
Agt. New Bedford Spinning Company, New Bedford, Mass.		
Chace, Arnold B.	Ac.	Apr. 26, 1906
Treas. Valley Falls Co., Albion, R. I.		
Chace, Benjamin C.	Ac.	Sept. 21, 1905
Gen. Mgr. Crown Mfg. Co., Pawtucket, R. I.		
Chace Mills	Sus.	Mar. 18, 1918
Henry F. Grinnell, Treas., Fall River, Mass.		
Chace, Richard B.	S.R.	Dec. 3, 1918
Treas. Shawmut Mills, Fall River, Mass.		
Chapman, Laurance D.	S.R.	Mar. 7, 1924
Asst. Treas. Hill & Cutler Co., New Bedford, Mass.		
Chapman, Robert	Ac.	Apr. 13, 1911
Pres. Cherew Cotton Mills, Inc., Cherew, S. C.		
Charlton Mills	Sus.	Jan. 14, 1919
James Sinclair, Treas., Fall River, Mass.		
Chase, Charles A.	As.	June 2, 1922
Asst. Mgr. M. P. Dept., General Electric Co., 84 State St., Boston, Mass.		
Chase, Charles B.	Ac.	Apr. 17, 1908
Gen. Mgr. Stevens Mfg. Co., P. O. Box 45, Fall River, Mass.		
Chase, Fred L.	As.	Mar. 2, 1923
F. A. Chase & Co., 253 West Exchange St., Providence, R. I.		
Chase, Simeon B.	Ac.	Apr. 21, 1875
Treas. King Philip Mills, Fall River, Mass.		
Chicopee Mfg. Corp.	Sus.	Sept. 12, 1917
Charles A. McCormick, Treas., Chicopee Falls, Mass.		

			Elected
Chidsey, John T.	As.	June 15, 1923	
Pres. & Treas. The Root Co., Church St., Bristol, Conn.			
Church, B. LeBaron	Ac.	Nov. 13, 1924	
Sales Mgr. New Bedford Cotton Waste Co., 43 Church St., New Bedford, Mass.			
City Mfg. Corp.	Sus.	July 17, 1917	
John B. Strongman, Treas., New Bedford, Mass.			
Clark, Avery B.	Ac.	Apr. 27, 1905	
Supt. Merrinack Mfg. Co., Lowell, Mass.			
Clark, George P.	Ac.	Apr. 16, 1926	
Pres. Columbia Narrow Fabric Co., Shannock, R. I.			
Clayton, William L.	{ L.	June 1, 1923	
Anderson, Clayton & Co., Houston, Tex.		June 1, 1923	
Clement, Alfred	Ac.	Mar. 7, 1924	
Supt. Dominion Textile Co., Ltd., 1788 Notre Dame St. E., Montreal, Quebec, Can.			
Clexton, Thomas J.	As.	Sept. 13, 1906	
Mgr. A. Klipstein & Co., 285 Congress St., Boston, Mass.			
Coates, Wallace B.	Ac.	May 3, 1918	
Agt. Farwell Bleachery, North Andover, Mass.			
Cobb, F. S.	Ac.	June 5, 1925	
Pres. Seamans & Cobb Thread Co., 140 Essex St., Boston, Mass.			
Cobb, W. C.	Ac.	Apr. 26, 1906	
Supt. Ware Shoals Mfg. Co., Ware Shoals, S. C.			
Coburn, F. G.	S.R.	Dec. 7, 1923	
Mgr. Sanderson & Porter, New York City.			
Coburn, James E.	Ac.	Oct. 4, 1907	
Agt. Androscoggin Mills, Lewiston, Me.			
Coffin, Langdon	Ac.	Sept. 29, 1911	
Purchasing Agt. Samson Cordage Wks., 144 Bellevue Ave., Newton, Mass.			
Coffin, Melvin H.	As.	Oct. 2, 1902	
National Ring Traveler Co., Providence, R. I.			
Coggeshall, John W.	Ac.	Apr. 30, 1909	
Tillotson Humidifier Co., 78 Fountain St., Providence, R. I.			
Colby, Alfred E.	Ac.	Apr. 6, 1922	
Asst. Treas. Pacific Mills, 24 Federal St., Boston, Mass.			
Coleman, Philip F.	S.R.	Oct. 5, 1923	
Sec. John Farnum Co., Philadelphia, Pa.			
Collins, Charles E.	Ac.	Apr. 17, 1890	
Agent, Methuen Co., Methuen, Mass.			
Colman, Howard D.	As.	Apr. 27, 1905	
Pres. Barber-Colman Co., Rockford, Ill.			
Colquhoun, M. W.	Ac.	Aug. 3, 1921	
Sec. Pepperell Mfg. Co., 141 Milk St., Boston, Mass.			
Comins, Frank B.,	Ac.	Oct. 28, 1891	
Gen. Mgr. American Moistening Co., 251 Causeway St., Boston, Mass.			
Cook, Albion C.	Ac.	Nov. 10, 1922	
Treas. Wampanoag Mills, Fall River, Mass.			

		Elected
Cook, Edward H.	Treas. Quissett Mills, New Bedford, Mass.	Ac. Apr. 28, 1910
Cook, G. Arthur	Treas. West Boylston Mfg. Co., 265 Main St., Easthampton, Mass.	Ac. Apr. 25, 1907
Cook, Kenneth B.	Mgr. Textile Section, U. S. Rubber Co., 451 So. Jefferson St. Orange, N. J.	As. July 15, 1922
Cooley, Fred A.	Supt. Atlantic Mills, 112 Warrington St., Providence, R. I.	Ac. Apr. 30, 1909
Coolidge, Amory	Asst. Treas. Pepperell Mfg. Co., P. O. Box 5075, Boston, Mass.	Ac. Oct. 14, 1925
Coon, J. L.	Atkinson, Haserick & Co., 152 Congress St., Boston, Mass.	As. May 3, 1918
Cooper, James A.	Whitin Machine Works, Whitinsville, Mass.	As. Sept. 13, 1906
Corn Products Refining Co.	Charles P. Slocum, New York City.	Sus. Mar. 2, 1918
Cornell Mills	Robert W. Zuill, Treas., Fall River, Mass.	Sus. July 20, 1918
Corr, Peter H.	Treas. Greenwich Bleachery, Taunton, Mass.	Ac. Apr. 24, 1895
Cottrell, B. S.	Parks-Cramer Co., 1102 Old South Bldg., Boston, Mass.	As. May 3, 1918
Couper, Archibald W.	Agt. Paul Whitin Mfg. Co., Rockdale Mills, Northbridge, Mass.	Ac. Oct. 29, 1918
Covel, Thomas D.	Pres. The Covel & Osborne Co., Fall River, Mass.	Ac. Apr. 26, 1906
Cowell, Richard	Agt. Greylock Mills, A. B. C., 33 Southworth Ave., Williamstown, Mass.	Ac. Apr. 24, 1902
Coxen, Harold M.	Hoosac Cotton Mills, North Adams, Mass.	S.R. Feb. 21, 1918
Cramer, Stuart W.	Pres. Cramerton Mills, Inc., Cramerton, N. C.	Ac. Apr. 26, 1906
Cranska, Lucius B.	Pres. The Floyd Cranska Thread Co., Moosup, Conn.	Ac. Sept. 21, 1905
Crawford, Dana R.	Sales Agt. U. S. Bobbin & Shuttle Co., 57 Eddy St., Providence, R. I.	As. Oct. 14, 1925
Crompton & Knowles Loom Works	Homer Gage, Pres., Worcester, Mass.	Sus. July 20, 1918
Cronkhite, Leonard W.	Pres. Leonard W. Cronkhite, Inc., 348 Congress St., Boston, Mass.	As. Apr. 30, 1909
Crown Mfg. Co.	Benjamin C. Chace, Gen. Mgr., Pawtucket, R. I.	Sus. Oct. 19, 1918
Cummings, Stanley R.	Research Engr. The Hoover Co., North Canton, Ohio	As. Mar. 7, 1924
Cumnock, John	Supt. Altavista Cotton Mills, Altavista, Va.	Ac. Apr. 30, 1914
Cunningham, George C.	Treas. Indian Head Mills of Alabama, 48 Franklin St., Boston, Mass.	Ac. Apr. 6, 1922

		Elected
Currier, Andrew J. 66 Broad St., Valley Falls, R. I.	Ac.	Apr. 25, 1888
Curtis & Marble Machine Co. Edwin H. Marble, Pres., Worcester, Mass.	Sus.	Apr. 8, 1919
Cushing, Joseph L. Daniel Cushing & Co., Fletcher & Rock Sts., Lowell, Mass.	As.	Apr. 26, 1900
Cutter, John Amory, Browne & Co., 48 Franklin St., Boston, Mass.	Ac.	June 5, 1925
Dana, Luther Supt. Dana Warp Mills, 55 Strondwater St., Westbrook, Me.	Ac.	Apr. 30, 1914
Dana, Philip Pres. Dana Warp Mills, 347 Brown St., Westbrook, Me.	Ac.	Sept. 29, 1898
Dana Warp Mills Philip Dana, Pres., Westbrook, Me.	Sus.	May 12, 1917
Daniels, F. G. Gen. Mgr. Dominion Textile Co., Ltd., 10 Victoria Sq., Montreal, Quebec, Can.	Ac.	Apr. 17, 1908
Danker, Daniel J. 73 Dean Rd., Brookline, Mass.	{ L.	Apr. 28, 1904 Apr. 25, 1907
Davis, Edward H. Asst. Mgr. Cotton Research Co., 1020 Washington St., Boston, Mass.	Ac.	Apr. 6, 1923
Davis Mills Frank L. Carpenter, Treas., Fall River, Mass.	Sus.	July 20, 1917
Davis, Poncet Poncet Davis Co., 226 Ohio Bldg., Akron, Ohio.	As.	June 1, 1923
Davol Mills M. R. Brown, Treas., Fall River, Mass.	Sus.	Aug. 12, 1918
Dawson, Arthur O. Vice Pres. Canadian Cottons, Ltd., 28 Victoria Sq., Montreal, Quebec, Can.	Ac.	Oct. 4, 1907
Day, Morgan G. Asst. Agt. Indian Orchard Co., Indian Orchard, Mass.	Ac.	May 3, 1921
Day & Zimmerman, Inc. Charles Penrose, Asst. Gen. Mgr., Philadelphia, Pa.	Sus.	Oct. 15, 1920
Dean, Milton O. Agt. Edwards Mfg. Co., Augusta, Me.	Ac.	Dec. 1, 1921
Deering, Milliken & Co., Inc. A. L. Fitzpatrick, Vice Pres., New York City.	Sus.	Nov. 26, 1919
De Forest, George Pres. Utica Steam & Mohawk Valley Cotton Mills, Utica, N. Y.	Ac.	Oct. 28, 1897
Delano, Arthur D. Treas. Manufacturers' Supply Co., 382 Acushnet Ave., New Bedford, Mass.	As.	May 5, 1919
Delano, George Treas. Bourne Mills, Fall River, Mass.	S.R.	May 1, 1920
DeNormandie, P. Y. Bliss, Fabyan & Co., 45 Franklin St., Boston, Mass.	Ac.	Apr. 29, 1896
Dexter, Henry C. Pres. Warwick Lace Works, Central Falls, R. I.	Ac.	Apr. 25, 1901

		Elected	
Dick, Evans, Jr.	Dick, Geary & Lancaster, Boston, Mass.	S.R.	June 14, 1926
Dick, Geary & Lancaster	Evans Dick, Jr., Boston, Mass.	Sus.	June 14, 1926
Dickinson, Arthur R.	Clark Thread Co., Newark, N. J.	Ac.	May 4, 1920
Dillon, Frederick N.	D. M. Dillon Steam Boiler Wks., Fitchburg, Mass.	As.	Sept. 22, 1904
Dimick, A. W.	Treas. Grosvenor-Dale Co., No. Grosvenor-Dale, Conn.	S.R.	Sept. 10, 1918
Dineen, John J.	Supt. La Tosca Yarn Mill, McLoughlin Textile Corp, Utica, N. Y.	Ac.	Apr. 30, 1914
Dixon, Ezra	Pres. Dixon Lubricating Saddle Co., Bristol, R. I.	As.	Sept. 21, 1905
Dodd, H. C.	Treas. Thomas Henry & Sons, Inc., P. O. Box 4720, Sta. E., Philadelphia, Pa.	Ac.	Oct. 5, 1922
Dodge, Linsley V.	Asst. Treas. W. C. Plunkett & Sons Co., Adams, Mass.	Ac.	Apr. 16, 1926
D'Olier, Franklin & Co., Inc.	Franklin D'Olier, Pres. & Treas., Philadelphia, Pa.	Sus.	Dec. 7, 1923
D'Olier, Franklin	Pres. & Treas. Franklin D'Olier & Co., Inc., Philadelphia, Pa.	S.R.	Dec. 7, 1923
Dolphin, Joseph	Mgr. Canadian Cottons, Ltd., Marysville, New Brunswick, Can.	Ac.	May 3, 1918
Donelan, Thomas E.	Gen. Mgr. Greenwich Bleachery, So. Main St., E. Greenwich, R. I.	Ac.	Feb. 2, 1922
Dooley, John S.	William J. Dooley & Co., 60 Congress St., Boston, Mass.	As.	Feb. 14, 1919
Doughty, Howard N.	Asst. Treas. Ipswich Mills, 160 State St., Boston, Mass.	Ac.	Nov. 10, 1922
Douty, Daniel E.	Vice Pres. and Gen. Mgr. U. S. Testing Co., Inc., 340 Hudson St., New York City.	Ac.	Oct. 2, 1913
Dow, Robert.	Treas. Solway Dyeing & Textile Co., Pawtucket, R. I.	Ac.	Apr. 25, 1901
Downer, Arthur T.	Treas. & Gen. Mgr. The Winchester Laundries, Inc., Converse Pl., Winchester, Mass.	As.	June 1, 1923
Draper, Arthur J.	Pres. Iccormorlee Cotton Mills, Monroe, N. C.	Ac.	Apr. 23, 1903
Draper, B. H. Bristow	Treas. Draper Corporation, Hopedale, Mass.	{ L.	Apr. 24, 1913 May 7, 1913
Draper Corp.	B. H. Bristow Draper, Treas., Hopedale, Mass.	Sus.	Aug. 10, 1917
Draper, George O.	Vice Pres. Hopedale Mfg. Co., Milford, Mass.	S.R.	July 1, 1919
Dresser, Henry C.	Agt. Beaver Mills, North Adams, Mass.	Ac.	Apr. 27, 1905
Duckworth, Harry S.	Gen. Mgr. Cranston Print Wks. Co., Cranston, R. I.	Ac.	Apr. 17, 1908

		Elected
Duff, John	David Duff & Son, New Bedford, Mass.	As. Apr. 28, 1910
Dumaine, Frederic C.	Treas. Amoskeag Mfg. Co., P. O. Box 5228, Boston, Mass.	Ac. Apr. 25, 1901
Duncan, Albert Greene	50 Kilby St., Boston, Mass.	Ac. Apr. 28, 1910
Duncan, David	Asst. to Agents, Lonsdale Co., 50 South Main St., Providence, R. I.	Ac. Jan. 11, 1926
Dunlap, F. Lincoln	Supt. Wampanoag Mills, 69 Alden St., Fall River, Mass.	Ac. Feb. 2, 1923
du Pont de Nemours, E. I. & Co., Inc.	E. A. MacKinnon, Boston, Mass.	Sus. Dec. 29, 1917
Durfee, Nathan	Asst. Treas. American Printing Co., Fall River, Mass.	Ac. Apr. 27, 1916
Dutcher, Frank J.	Pres. Draper Corp., Hopedale, Mass.	Ac. Apr. 24, 1902
Dwight Mfg. Co.	George Nichols, Treas., Chicopee, Mass.	Sus. Dec. 5, 1918
Eames, Charles H.	Pres. Lowell Textile School, Lowell, Mass.	Ac. Apr. 25, 1907
Earle, Frederic E.	Pres. & Treas. F. E. Earle Co., 30 North St., Fairhaven, Mass.	As. Apr. 6, 1923
Earle, G. Kenneth	Pres. G. Kenneth Earle Co., 4 Market Sq., Providence, R. I.	As. July 10, 1925
Easton, Frederic W.	Pres. Wapoyset Mfg. Co., 180 Weeden St., Pawtucket, R. I.	Ac. Apr. 25, 1910
Eastwood, Benjamin	Sec. Benjamin Eastwood Co., 300 Straight St., Paterson, N. J.	Ac. Apr. 13, 1911
Eddy, Jesse P.	Treas. Tillinghast, Stiles Co., P. O. Box 1522, Providence, R. I.	Ac. Sept. 21, 1905
Eddy, John D.	Supt. Weetamoe Mills, 190 Winter St., Fall River, Mass.	Ac. Apr. 27, 1916
Ely, Frederick W.	Agt. Columbian Mfg. Co., Greenville, N. H.	Ac. Apr. 25, 1888
Ely, Grosvenor	Treas. Ashland Cotton Co., Norwich, Conn.	Ac. Sept. 30, 1908
Emery, Arthur L.	Agt. Wamsutta Mills, P. O. Box 917, New Bedford, Mass.	Ac. Apr. 5, 1921
Erhard, George P.	Pres. The Stafford Co., Boston, Mass.	S.R. Apr. 1, 1918
Erwin, William A.	Treas. Erwin Cotton Mills, West Durham, N. C.	Ac. Sept. 29, 1911
Esmond Mills, The	Dexter Stevens, Mgr., Esmond, R. I.	Sus. Nov. 14, 1918
Estes, Elmer B.	Vice Pres. Estes Mills, Fall River, Mass.	Ac. May 3, 1918
Estes, George H.	Asst. Agt. Continental Mills, 196 Bates St., Lewiston, Me.	Ac. May 5, 1922
Everett, Henry C., Jr.	Treas. Winnsboro Mills, 24 Federal St., Boston, Mass.	Ac. Sept. 15, 1916

		Elected
Everett, James R.	S.R.	Mar. 15, 1918
Vice Pres. & Gen. Mgr. Wonalancet Co., Nashua, N. H.		
Everett Mills	Sus.	Aug. 1, 1923
Frederic C. McDuffie, Treas., Lawrence, Mass.		
Fabyan, Francis W.	Ac.	Sept. 29, 1911
Bliss, Fabyan & Co., 45 Franklin St., Boston, Mass.		
Fales, J. Richmond	As.	Apr. 24, 1923
Vice Pres. Fales & Jenks Machine Co., Pawtucket, R. I.		
Farlow, John S.	S.R.	Jan. 30, 1925
Asst. Treas. Whittenton Mfg. Co., Taunton, Mass.		
Farnsworth, John P.	Ac.	Mar. 4, 1920
Pres. Providence Dye, Bleach. & Cal. Co., 52 Valley St., Providence, R. I.		
Farnum, John, Co.	Sus.	Oct. 5, 1923
Philip F. Coleman, Sec., Philadelphia, Pa.		
Farrell, J. E.	Ac.	June 6, 1924
Supt. Passaic Division, Essex Cotton Mills, Passaic, N. J.		
Faunce, Vernon C.	Ac.	Apr. 17, 1908
Ag't. Warren Cotton Mills, W. Warren, Mass.		
Ferguson, Alfred L.	Ac.	Oct. 4, 1907
Vice Pres. Consolidated Textile Corp., 88 Worth St., New York City.		
Ferguson, J. C.	As.	May 3, 1921
Gen. Mgr. Eclipse Textile Co., Inc., Elmira, N. Y.		
Ferguson, James T.	Ac.	Oct. 5, 1899
Ag't. Warwick Mills, Centreville, R. I.		
Ferguson, John W.	As.	Apr. 24, 1895
152 Market St., Paterson, N. J.		
Ferrier, William	Ac.	Apr. 6, 1922
102 Henry Ave., Lynn, Mass.		
Field, Frank S.	{ L.	Oct. 25, 1895 Apr. 27, 1916
Asst. Treas. Massacomet Yarn Mills, Shattuckville, Mass.		
Filley, Frank H.	Ac.	Sept. 30, 1914
Vice Pres. American Mfg. Co., Noble and West Sts., Brooklyn, N. Y.		
Fish, Charles H.	{ L.	Apr. 27, 1887 Apr. 28, 1904
California Club, Los Angeles, Calif.		
Fisher, Andrew	Ac.	Apr. 28, 1910
85 High St., Boston, Mass.		
Fisher, Stuart D.	Ac.	July 10, 1925
Supt. Westerly Branch, Lorraine Mfg. Co., Westerly, R. I.		
Fitchburg Yarn Co.	Sus.	Nov. 1, 1918
R. S. Wallace, Treas., Fitchburg, Mass.		
Fitzpatrick, A. L.	S.R.	Nov. 26, 1919
Vice Pres. Deering, Milliken & Co., Inc., New York City.		
Flather, Frederick A.	{ L.	Apr. 29, 1891 Apr. 17, 1908
Treas. Boott Mills, 79 Milk St., Boston, Mass.		
Flather, Frederick	{ L.	May 1, 1924 May 1, 1924
Boott Mills, Lowell, Mass.		
Flather, John Rogers	{ L.	May 1, 1924 May 1, 1924
Boott Mills, Lowell, Mass.		

	Elected
Flynn, George D., Jr. Asst. Treas. The Ancona Co., Fall River, Mass.	Ac. June 14, 1926
Forestdale Mfg. Co. Forestdale, R.I.	Sus. Jan. 23, 1919
Forsaith, Charles Henry Supt. Jackson Mill of Nashua Mfg. Co., Nashua, N. H.	Ac. Oct. 14, 1925
Fort Dummer Mills John McMahon, Treas., Brattleboro, Vt.	Sus. Nov. 15, 1918
Foss, Eugene N. Pres. B. F. Sturtevant Co., Hyde Park, Mass.	Ac. Apr. 25, 1907
Foss, Noble Pres. Maverick Mills, 60 State St., Boston, Mass.	Ac. Apr. 16, 1926
Fowler, C. S. Pres. The Westerly Textile Co., Westerly, R. I.	Ac. June 29, 1920
Fowler, E. T. Treas. & Mgr. Foster Machine Co., Westfield, Mass.	As. Apr. 26, 1906
Fowler, Wells R. Sec. & Treas. The Westerly Textile Co., Westerly, R. I.	S.R. Apr. 16, 1926
Fraker, George W. Vice Pres. National City Bank, New York City.	As. Mar. 1, 1919
France, Edward W. Director, Philadelphia Textile School, Broad and Pine Sts., Philadelphia, Pa.	Ac. Sept. 22, 1896
France, Thomas W. 150 Beaufort St., Providence, R. I.	As. Dec. 7, 1923
Francis T. A., & Co. T. A. Francis, Providence, R. I.	Sus. Aug. 1, 1919
Freeman, Arthur C. Vice Pres. H. W. Butterworth & Sons Co., 1212 Turks Head Bldg., Providence, R. I.	Ac. Apr. 27, 1899
Frisbie, Calvin H. Pres. Attawaugan Co., Killingly, Conn.	S.R. July 20, 1918
Fritz, Frank R. Nashua Mfg. Co., 48 Franklin St., Boston, Mass.	Ac. Oct. 16, 1919
Gage, Homer Pres. Crompton & Knowles Loom Works, Worcester, Mass.	S.R. July 20, 1918
Gagnebin, Charles L. Vice Pres. H. A. Metz & Co., Inc., 159 High St., Boston, Mass.	As. Apr. 30, 1914
Gallant, Walter B. Agt. Newmarket Mfg. Co., Newmarket, N. H.	Ac. Feb. 2, 1922
Gallup, W. Arthur Treas. Arnold Print Wks., North Adams, Mass.	Ac. Apr. 30, 1909
Gama, Salvado R. Mgr. Machado, Gama & Co., Caixa Postal No. 2093, Rio de Janeiro, Brazil.	{ L. Apr. 27, 1916 Apr. 26, 1917
Gardner, Arnold C. Treas. Manomet Mills, 1 Clinton Pl., New Bedford, Mass.	Ac. Apr. 26, 1906
Gardner, N. L. R. Pres. R. L. Greene Paper Co., 50 Fountain St., Providence, R. I.	As. Sept. 29, 1911

		Elected
Gardner, William B.	Treas. Nashawena Mills, New Bedford, Mass.	Ac. Sept. 23, 1909
Garland, James P.	Vice Pres. Garland Mfg. Co., Saco, Me.	As. Apr. 16, 1926
Garside, Alston H.	Mgr. Industrial Service Dept., Merchants National Bank, Boston, Mass.	As. Apr. 16, 1926
Garvin, James	Supt. Harmony Mills, Cohoes, N. Y.	Ac. Oct. 20, 1917
Gary, E. Stanley	Pres. Gary Mfg. Co., 204-206 American Bldg., Baltimore, Md.	Ac. Oct. 1, 1903
General Electric Company	West Lynn, Mass. Gerard Swope, Pres., New York City. Charles A. Chase, Boston, Mass.	Sus. May 24, 1917
Gibbs, E. Payson	Supt. Pepperell Mfg. Co., Biddeford, Me.	Ac. Sept. 23, 1909
Gilliland, Charles L.	Treas. Aberfoyle Mfg. Co., 1530 Bankers Trust Bldg., Philadelphia, Pa.	Ac. Oct. 2, 1913
Gilman, Edward T.	363 Bridge St., Lowell, Mass.	Ac. May 5, 1922
Gilmore, George L.	K. M. Gilmore & Co., Somerville, Mass.	Ac. Apr. 29, 1916
Gilmore, K. M., & Co.	George L. Gilmore, Somerville, Mass.	Sus. June 4, 1917
Glennon, John F.	Supt. Quissett Mills, New Bedford, Mass.	Ac. Apr. 16, 1926
Glennon, Thomas F.	Agt. Quissett Mill, New Bedford, Mass.	Ac. Apr. 28, 1910
Gniessin, Vladimir F.	Blythewood, S. C.	Ac. Oct. 1, 1903
Goddard Brothers	R. H. I. Goddard, Treas., Providence, R. I.	Sus. Nov. 8, 1918
Goddard, R. H. I.	Treas. Goddard Brothers, Providence, R. I.	S.R. Nov. 8, 1918
Godfrey, William C.	Treas. and Agt. Indian Orchard Co., Indian Orchard, Mass.	As. Oct. 29, 1890
Goerner, Gustav William	Roessler & Hasslacher Chemical Co., 40 Central St., Boston, Mass.	As. Apr. 27, 1916
Goff, Albert H.	The Textile-Finishing Machinery Co., Providence, R. I.	Ac. Apr. 25, 1907
Goff, Lyman B.	Pres. Union Wadding Co., Pawtucket, R. I.	Ac. Sept. 21, 1905
Goldsmith, Wm. H., Jr.	Consulting Engr., 43 Garrison Rd., Brookline, Mass.	As. Oct. 20, 1917
Goodyear Cotton Mills, Inc.	Ira A. McDaniel, Asst. Treas., Killingly, Conn.	Sus. Feb. 8, 1918
Gordon, Beirne, Jr.	Supt. The Skenandoa Cotton Co., 21 Clinton Pl., Utica, N. Y.	Ac. Apr. 28, 1910

		Elected
Gordon, C. B.	Pres. Dominion Textile Co., Ltd., 10 Victoria Sq., Montreal, Quebec, Canada.	Ac. Sept. 13, 1906
Gordon, Frank S.	Agt. Boston Duck Co., Bondsville, Mass.	Ac. Sept. 8, 1922
Gordon, Frederick B.	Pres. Columbus Mfg. Co., Columbus, Ga.	Ac. Apr. 26, 1900
Gosnold Mills Co.	Charles M. Holmes, Treas., New Bedford, Mass.	Sus. Sept. 25, 1917
Goulston, Geo. A.	197 Columbia Rd., Dorchester, Mass.	As. Nov. 13, 1924
Gourley, Hugh J.	Agt. Warren Mfg. Co., Water St., Warren, R. I.	Ac. Sept. 8, 1922
Goyette, A. Erland	Mgr. Joseph Noone's Sons Co., Peterboro, N. H.	Ac. May 5, 1922
Grab, Max	M. Grab Sons, Prague VIII, Czechoslovakia.	Ac. Apr. 6, 1922
Grandison, Ralph V.	Agt. Hazard Cotton Co., P. O. Box 1835, Boston, Mass.	As. June 29, 1920
Granite Mills	James A. Sinclair, Treas., Fall River, Mass.	Sus. June 20, 1918
Grant, George P., Jr.	Treas. Grant Yarn Co., Fitchburg, Mass.	Ac. Sept. 27, 1894
Grant Yarn Co.	George P. Grant, Jr., Treas., Fitchburg, Mass.	Sus. May 12, 1917
Gray, William H.	Pres. and Treas. Dedham Finishing Co., Dedham, Mass.	Ac. May 3, 1918
Greene, Edwin Farnham	Treas. Pacific Mills, 24 Federal St., Boston, Mass.	Ac. Apr. 24, 1902
Greene, Everett A.	Lockwood, Greene & Co., 24 Federal St., Boston, Mass.	Ac. May 4, 1920
Greene, F. Hartwell	Treas. New England Southern Mills, 24 Federal St., Boston, Mass.	Ac. June 1, 1923
Greene, R. L., Paper Co.	N. L. R. Gardner, Pres., Providence, R. I.	Sus. Aug. 10, 1917
Greene, S. Harold	Pres. New England Southern Mills, 24 Federal St., Boston, Mass.	Ac. Apr. 27, 1905
Greenhalgh, George T.	Treas. Greenhalgh Mills, Pawtucket, R. I.	Ac. Apr. 30, 1909
Greenough, Allan B.	45 Milk St., Boston, Mass.	Ac. Oct. 24, 1918
Greenville Finishing Company	A. F. Shaw, Pres., Greenville, R. I.	Sus. June 14, 1926
Greer, Samuel	Supt. Lancaster Mills, 40 Chestnut St., Clinton, Mass.	Ac. Apr. 24, 1923
Greer, William K.	Agt. Hoosac Cotton Mills, P. O. Box 258, North Adams, Mass.	Ac. Apr. 26, 1906
Greylock Mills	Charles T. Plunkett, Pres., North Adams, Mass.	Sus. May 15, 1917
Gridley, Oscar W.	Treas. Utica Knitting Co., Erie St., Utica, N. Y.	Ac. Apr. 28, 1910

		Elected	
Grinnell, Henry F.	Treas. Chace Mills, Fall River, Mass.	Ac.	Sept. 11, 1915
Grinnell Mfg. Corp.	Joseph W. Webster, Treas., New Bedford, Mass.	Sus.	Mar. 18, 1918
Griswoldville Mfg. Co.	Joseph W. Ballard, Treas., Griswoldville, Mass.	Sus.	Jan. 21, 1918
Grosvenor-Dale Co.	A. W. Dimick, Treas., No. Grosvenor-Dale, Conn.	Sus.	Sept. 10, 1918
Grosvenor, William	Pres. Grosvenor-Dale Co., P. O. Box 1384, Providence, R. I.	Ac.	Apr. 28, 1910
Gunby, Frank M.	c/o Charles T. Main, 200 Devonshire St., Boston, Mass.	As.	Apr. 26, 1917
Hagan, Thomas H.	Mgr. The Textile Development Co., 80 Federal St., Boston, Mass.	Ac.	June 5, 1925
Hague, Edwin D.	Whitin Machine Wks., Whitinsville, Mass.	As.	Oct. 5, 1922
Hale, Frank J.	Saco-Lowell Shops, 1 Federal St., Boston, Mass.	Ac.	Apr. 27, 1892
Hale, Roger D.	Saco-Lowell Shops, 1 Federal St., Boston, Mass.	As.	Oct. 14, 1925
Haley, Henry T.	Pres. Dundee Mills, Hooksett, N. H.	Ac.	Sept. 30, 1914
Hall, F. C.	Agt. Manville Jenckes Co., Pawtucket, R. I.	Ac.	Oct. 29, 1918
Hall, H. Dwight	Sec. Boston Mfrs. Mutual Fire Ins. Co., 185 Franklin St., Boston, Mass.	As.	June 1, 1923
Hall, Lindsay S.	Supt. Devon Mills, Inc., New Bedford, Mass.	Ac.	Oct. 16, 1919
Hall, Walter B.	Agt. Whitman Mills, New Bedford, Mass.	Ac.	Apr. 25, 1901
Halliwell, William	Agt. Lawton Spinning Co., Woonsocket, R. I.	Ac.	Sept. 26, 1901
Hanaford, John H.	89 State St., Boston, Mass.	As.	May 3, 1918
Hannah, George K.	Supt. Parkhill Mfg. Co., 70 Congress St., Fitchburg, Mass.	Ac.	Apr. 24, 1923
Hansahoe Mfg. Co.	E. V. Sutton, Treas., Valley Falls, R. I.	Sus.	Nov. 8, 1918
Hansen, Harold C.	Boston Transcript, 324 Washington St., Boston, Mass.	{ L.	Sept. 23, 1909 Sept. 23, 1910
Harden, Henry C.	Agt. Great Falls Mfg. Co., Somersworth, N. H.	Ac.	May 3, 1918
Harding, Charles L.	Pres. Whitman Mills, 77 Franklin St., Boston, Mass.	Ac.	Sept. 11, 1912
Harding, Tilton & Co.,	Newell W. Tilton, New York City.	Sus.	Dec. 17, 1917
Harmon, William C.	Pres. The Pond Lily Co., New Haven, Conn.	S.R.	Aug. 21, 1917

		Elected
Harmony Mills	Sus.	May 10, 1917
John Skinner, Treas., Cohoes, N. Y.		
Harris, Thomas	Ac.	Jan. 11, 1926
Gen. Supt. Social, Nourse & Globe Mills, Manville Jenckes Co., Woonsocket, R. I.		
Harrison, Gilbert D.	Ac.	Jan. 12, 1922
Treas. Lewiston Bleachery & Dye Works, 253 Pine St., Lewiston, Me.		
Harrison, Herbert	As.	Jan. 14, 1919
Agt. John Hetherington & Sons, Ltd., 49 Federal St., Boston, Mass.		
Harrower, Francis D.	Ac.	Apr. 4, 1924
Asst. Agt. The Wauregan Co., Wauregan, Conn.		
Harrower, Gordon	Ac.	Feb. 2, 1923
Vice Pres. & Asst. Treas. The Wauregan Co., P. O. Box 1425, Providence, R. I.		
Hartley, Frank	Ac.	Apr. 27, 1905
Frank Hartley & Son, 146 Summer St., Boston, Mass.		
Hartshorne, William D.	{ L.	Apr. 27, 1899 Apr. 26, 1906
121 Johnson Street, Lynn, Mass.		
Hastings, Walter M.	Ac.	Apr. 23, 1903
Agt. Monomac Spinning Co., Lawrence, Mass.		
Hatch, Roy O.	Ac.	Apr. 16, 1926
Supt. Samson Cordage Works, Shirley, Mass.		
Hathaway, Edgar F.	As.	Apr. 27, 1905
Vice Pres. & Gen. Mgr. Shawmut Engineering Co., 195 Freeport St., Dorchester, Mass.		
Hathaway, Horatio	As.	Apr. 16, 1926
Pres. Hathaway Mfg. Co., New Bedford, Mass.		
Hathaway Mfg. Co.	Sus.	Nov. 21, 1918
J. E. Stanton, Jr., Treas., New Bedford, Mass.		
Haughton, M. Graeme	{ L.	Apr. 29, 1915 May 15, 1916
Haughton & Co., 20 Central St., Boston, Mass.		
Haurowitz, Stephen Carl	Ac.	Apr. 6, 1922
L. Haurowitz-Grottan, Prague II, Marianska 39, Czechoslovakia.		
Havey, J. Fred	As.	Sept. 17, 1910
Mgr. Foreign Sales Dept., Saco-Lowell Shops, 1 Federal St., Boston, Mass.		
Hawes, William B.	Ac.	Apr. 24, 1895
O. S. Hawes & Brother, P. O. Box 733, Fall River, Mass.		
Haworth, Richard	As.	Mar. 7, 1924
Mgr. Richard Haworth, Inc., 25 Fountain St., Providence, R. I.		
Hayward, Harry T.	Ac.	Apr. 25, 1907
Pres. Forestdale Mfg. Co., Franklin, Mass.		
Hazard, William H., Jr.	Tech.	Apr. 16, 1926
The Textile Development Co., 80 Federal St., Boston, Mass.		
Heap, Charles F.	Ac.	May 1, 1918
Supt. The Lawton Mills Corp., Plainfield, Conn.		
Heatley, Thomas E.	Ac.	Sept. 11, 1915
320 Broadway, New York City.		
Hedrick, Charles C.	As.	Apr. 23, 1903
c/o Mitsubishi Shoji Kaisha, Ltd., 15 Andojibashidori, 3 Chome, Minami-Ku Osaka, Japan.		

		Elected
Hendry, Robert A.	Asst. Supt. Nashawena Mills, New Bedford, Mass.	Ae. June 14, 1926
Herrick, Clifford E.	Northern Agent, Boyce Weavers Knotter, Providence, R. I.	As. June 14, 1926
Herrick, Robert F., Jr.	Treas. Saco-Lowell Shops, 1 Federal St., Boston, Mass.	As. Apr. 6, 1920
Herrick, Robert F.	Pres. Pacific Mills, 1 Federal St., Boston, Mass.	Ae. Apr. 27, 1916
Herron, Alexander T.	Supt. Dyeing & Finishing, Renfrew Manufacturing Co., Adams, Mass.	Ae. Apr. 4, 1924
Hersey, Henry H.	Mgr. Roller Leather Dept. A. C. Lawrence Leather Co., Boston, Mass.	As. Apr. 16, 1926
Hervey, Fred L.	Pres. F. L. Hervey & Co., 373 New Boston Rd., Fall River, Mass.	As. May 5, 1919
Hewins, Edmund D.	Pres. & Treas. E. D. Hewins, Inc., 72 Lincoln St., Boston, Mass.	As. Oct. 5, 1922
Heyes, Fred L.	Agt. Nonquitt Spinning Co., 449 Clinton St., New Bedford, Mass.	Ae. Sept. 11, 1915
Hill, John H.	Steel Heddle Mfg. Co., Providence, R. I.	As. Apr. 16, 1926
Hill & Cutler Co.	Laurance D. Chapman, Asst. Treas., New Bedford, Mass.	Sus. Mar. 7, 1924
Hill Mfg. Co.	Chas. Walcott, Treas., Lewiston, Me.	Sus. June 15, 1923
Hillman, Ralph G.	Asst. Supt. Samson Cordage Works, Shirley, Mass.	Ae. Apr. 16, 1926
Hinckley, Everett H.	Borne-Serymser Co., 17 Battery Pl., New York City.	As. Aug. 3, 1921
Hinckley, George C.	Textile Broker, 707 Grosvenor Bldg., Providence, R. I.	Ae. Sept. 23, 1909
Hindle, Joseph H.	Supt. Print Wks. Div. American Printing Co., Water St., Fall River, Mass.	Ae. June 1, 1923
Hitchcock, Thomas B.	32 Fuller St., Brookline, Mass.	Ae. Apr. 13, 1911
Hobbs, A. F.	Vice Pres. New York Mills Corp., New York Mills, N. Y.	S.R. Feb. 10, 1920
Hobbs, Ernest S.	Treas. Aurora Cotton Mills, Aurora, Ill.	Ae. Oct. 29, 1918
Hobbs, Franklin W.	Pres. Arlington Mills, 78 Chauncy St., Boston, Mass.	{ L. Apr. 27, 1899 Apr. 18, 1917
Hodges, Charles E.	Pres. American Mutual Liability Ins. Co., 142 Berkeley St., Boston, Mass.	As. Apr. 17, 1908
Holbrook, H. G.	Kendall Mills, Walpole, Mass.	S.R. Aug. 3, 1921
Holcomb, Clark W.	New Bedford Boiler & Machine Co., P. O. Box 653, New Bedford, Mass.	Ae. Sept. 21, 1905

	Elected
Holgate, Benjamin Agt. Boot Mills, Lowell, Mass.	Ac. Jan. 12, 1922
Holmes, Charles M. Treas. Holmes Mfg. Co., New Bedford, Mass.	Ac. Apr. 27, 1899
Holmes, Harold D. Asst. Treas. Gosnold Mills Co., New Bedford, Mass.	Ac. May 1, 1924
Holmes Mfg. Co. Charles M. Holmes, Treas., New Bedford, Mass.	Sus. Sept. 18, 1917
Holt, John H. Treas. Luther Mfg. Co., P. O. Box 57, Fall River, Mass.	{ L. Apr. 23, 1903 Feb. 25, 1920
Homer, Arthur C. Treas. Pilgrim Mills, Fall River, Mass.	S.R. July 17, 1917
Hood, Ernest N. Treas. Monomac Spinning Co., 78 Chauncy St., Boston, Mass.	Ac. Oct. 20, 1917
Hooper, James P. Vice Pres. William E. Hooper & Sons Co., Baltimore, Md.	Ac. May 3, 1918
Hooper, Robert P. Treas. Hooper Sons Mfg. Co., Juniper and Cherry Sts., Philadelphia, Pa.	Ac. Sept. 21, 1905
Hoosac Cotton Mills Harold M. Coxen, North Adams, Mass.	Sus. Feb. 21, 1918
Hopedale Mfg. Co. George Otis Draper, Vice Pres., Milford, Mass.	Sus. July 1, 1919
Hopkins, John Anderson, Clayton & Co., 45 Franklin St., Boston, Mass.	S.R. June 1, 1923
Hopkinson, Thomas Hopkinson Dyeing & Textile Works, Fall River, Mass.	Ac. Apr. 25, 1912
Hopson, Harry B. Green & Hopson, Green Bldg., Springfield, Mass.	Ac. Apr. 28, 1904
Houghton, Harry E. Supt. Spinning, Dartmouth Mfg. Co., Cove St., New Bedford, Mass.	Ac. Apr. 30, 1914
Howard Bros. Mfg. Co. Herbert Midgley, Pres. & Gen. Mgr., Worcester, Mass.	Sus. Jan. 22, 1918
Howe, Dudley R. Director, Lockwood, Greene & Co., Mgrs., 24 Federal St., Boston, Mass.	Ac. Oct. 5, 1923
Howe, Frederick W. Vice Pres. Crompton & Knowles Loom Wks., P. O. Box 1361, Providence, R. I.	As. Apr. 24, 1902
Howe, Henry S. Lawrence & Co., 89 Franklin St., Boston, Mass.	Ac. Oct. 31, 1877
Howe, James Carlton Vice Pres. Old Colony Trust Co., 17 Court St., Boston, Mass.	As. Sept. 11, 1912
Howe, Parkman D. Asst. Treas. Merrimack Mfg. Co., 53 State St., Boston, Mass.	Ac. Sept. 11, 1915
Howe, Percival S., Jr. Wellington, Sears & Co., 66 Worth St., New York City.	Ac. Mar. 2, 1923
Howe, Woodbury K. Asst. Supt. Merrimack Mfg. Co., Lowell, Mass.	Ac. June 7, 1919
Howland, Weston Supt. Gosnold Mills Co., New Bedford, Mass.	Ac. May 1, 1924

		Elected
Hubbard, Samuel T.	As.	Sept. 13, 1906
Hubbard Bros. & Co., 66 Beaver St., New York City.		
Huggins, Gurry E.	As.	Apr. 30, 1914
120 Broadway, New York City.		
Hunnewell, Arnold W.	As.	May 3, 1921
Treas. Nashua Homes Corp., P. O. Box 1302, Boston, Mass.		
Hunsicker, Alvin	Ac.	Apr. 30, 1909
Standard Textile Products Co., 320 Broadway, New York City.		
Hunter, Henry P.	Ac.	Apr. 24, 1913
Supt. Equinox Mill, Anderson, S. C.		
Huntoon, Harrison B., Jr.	Ac.	June 1, 1923
Treas. Providence Braid Co., P. O. Box 1271, Providence, R. I.		
Huntoon, Maxwell C.	Ac.	June 1, 1923
Pres. Woodlawn Finishing Co., P. O. Box 1211, Providence, R. I.		
Hyslop, Samuel	Ac.	Sept. 30, 1908
Mgr. Saxony Worsted Mills, Newton, Mass.		
Ilsley, John P.	As.	Oct. 6, 1921
N. E. Mgr. Wing & Evans, Inc., 89 State St., Boston, Mass.		
Inches, Charles E.	Ac.	May 4, 1920
Treas. Androscoggin Mills, 77 Franklin St., Boston, Mass.		
Interlaken Mills	Sus.	Oct. 29, 1918
Harris H. Bucklin, Asst. Treas., Phenix, R. I.		
Ipswich Mills	Sus.	June 6, 1924
Russell H. Leonard, Treas., Ipswich, Mass.		
Jackson, N. Baxter	As.	Feb. 5, 1926
Vice Pres. Chemical National Bank, 270 Broadway, New York City.		
Jackson, P. T.	Ac.	Sept. 21, 1905
Vice Pres. Essex Cotton Mills, P. O. Box 2035, Boston, Mass.		
Jackson, S. Eugene	Ac.	May 1, 1924
Asst. Treas. Crown Mfg. Co., Pawtucket, R. I.		
Jamieson, Joseph B.	Ac.	Oct. 2, 1902
Treas. Multiple Winding Co., 77 Sumner St., Boston, Mass.		
Jamieson, Philip S.	Ac.	June 14, 1926
Vice Pres. Multiple Winding Co., Boston, Mass.		
Jelleme, W. O.	Ac.	Aug. 5, 1919
Cohn-Hall-Marx Co., 93 Franklin St., New York City.		
Jenckes, Earl S.	Ac.	Apr. 27, 1905
Vice Pres. & Gen. Mgr. Reading Cotton Mill, Jos. Bancroft & Sons Co. of Philadelphia, Reading, Pa.		
Jenckes, Frederick L.	Ac.	Apr. 25, 1907
Treas. Manville Jenckes Co., Pawtucket, R. I.		
Jenks, Robert R.	As.	Oct. 5, 1922
Pres. Fales & Jenks Machine Co., 320 Dexter St., Pawtucket, R. I.		
Jenks, Samuel A.	As.	Apr. 16, 1926
Sec. & Gen. Mgr. Union Electric Supply Co., New Bedford, Mass.		
Jennings, Edward B.	Ac.	Sept. 29, 1898
547 High St., Fall River, Mass.		
Jennings, William H.	S.R.	Nov. 1, 1918
Treas. Algonquin Printing Co., Fall River, Mass.		

	Elected
Johnson, Arthur R. Ridley Watts Co., 44 Leonard St., New York City.	As. May 1, 1924
Johnson, Edward M. Sec. & Vice Pres. Arnold, Hoffman & Co., Inc., P. O. Box 1376, Providence, R. I.	As. Apr. 29, 1915
Jones & Brown Co. William A. Jones, Pres., Boston, Mass.	Sus. July 15, 1922
Jones, Allen Asst. Mgr. Beaver Mills, 102 Worth St., New York City.	Ac. Oct. 5, 1922
Jones, Ernest G. Cooper & Brush, 826 Industrial Trust Bldg., Providence, R. I.	As. May 5, 1919
Jones, William A. Pres. Jones & Brown Co., Boston, Mass.	S.R. July 15, 1922
Judson, Wm. D. Parker, Wilder & Co., New York City.	S.R. Nov. 23, 1918
Jury, Alfred E. United States Rubber Co., 58th St. & 11th Ave., New York City.	As. Sept. 16, 1916
Kay, K. Binny & Co. (Madras) Ltd., Madras, India.	Ac. June 6, 1924
Keeler, Lawrence M. Agt. Whitin Machine Wks., Whitinsville, Mass.	As. Sept. 26, 1901
Kelley, Ahira Baker Bemis Bro. Bag. Co., 40 Central St., Boston, Mass.	Ac. Apr. 13, 1911
Kelley, Timothy J. Vice Pres. Brighton Mills, Passaic, N. J.	Ac. Apr. 30, 1909
Kendall, Henry P. Pres. Kendall Mills, 80 Federal St., Boston, Mass.	Ac. Apr. 29, 1915
Kendall Mills H. G. Holbrook, Walpole, Mass.	Sus. Aug. 3, 1921
Kenney, Frank B. Pres. T. C. Entwistle Co., 297 Market St., Lowell, Mass.	As. Oct. 5, 1899
Kenney, Joseph T. Pres. Sharp Mfg. Co., New Bedford, Mass.	Ac. May 3, 1918
Kern, William E., Jr. Treas. Taber Mill, New Bedford, Mass.	Ac. Sept. 23, 1909
Kerr, James B. Agt. American Thread Co., Fall River, Mass.	Ac. Apr. 25, 1907
Killheffer, Elvin H. Vice Pres. Newport Chemical Wks., Inc., Passaic, N. J.	S.R. Nov. 10, 1919
Killian, J. R. Supt. Beaver Mills, North Adams, Mass.	Ac. Nov. 1, 1923
Kimball, William N. Agt. Manville Co., Woonsocket, R. I.	Ac. Apr. 24, 1902
King, Alexander 177 Walnut St., East Orange, N. J.	Ac. Apr. 27, 1905
King, Gelston T. E. and F. King Co., Inc., 367 Atlantic Ave., Boston, Mass.	As. Nov. 13, 1924
King Philip Mills Simeon B. Chase, Treas., Fall River, Mass.	Sus. June 14, 1918

		Elected
Kirk, John T.	Ac.	Apr. 27, 1905
Gen. Supt. Nashawena Mill, 109 Bedford St., New Bedford, Mass.		
Klebart, Fred S.	As.	Apr. 25, 1912
The J. B. Ford Co., Wyandotte, Mich.		
Kleeb, Leonard, Jr.	Ac.	May 3, 1918
Agt. Ipswich Mills, Ipswich, Mass.		
Knight, Jesse A.	Ac.	Oct. 26, 1892
Agt. Manomet Mills, New Bedford, Mass.		
Knight, Walter B.	Ac.	Apr. 24, 1889
Agt. Quidnick-Windham Mfg. Co., Willimantic, Conn.		
Knowland, Richard G.	As.	Mar. 7, 1924
Con. Chemical Eng., 88 Broad St., Boston, Mass.		
Knowlton, Harold W.	Ac.	June 5, 1925
Treas. The Textile Development Co., 77 Summer St., Boston, Mass.		
Knowlton, Harry W.	As.	Nov. 1, 1923
Pres. Knowlton & Newton Co., Inc., 545 Broadway, Lowell, Mass.		
Kunhardt, L. H.	As.	Oct. 2, 1913
Vice Pres. Boston Mfrs. Mutual Fire Ins. Co., 185 Franklin St., Boston, Mass.		
Lamport Mfg. Supply Co.	Sus.	Nov. 13, 1924
Samuel C. Lamport, Pres., New York City.		
Lamport, Samuel C.	S.R.	Nov. 13, 1924
Pres. Lamport Mfg. Supply Co., New York City.		
Lamson, William A.	As.	Apr. 27, 1916
Pres. U. S. Mailing Case Co., 42 Church St., Lowell, Mass.		
Lancaster Mills	Sus.	Nov. 5, 1917
S. Harold Greene, Pres., Clinton, Mass.		
Lane, David F.	Ac.	Dec. 5, 1924
W. T. Lane & Bros., Poughkeepsie, New York.		
Langdon, Duncan	Ac.	Jan. 11, 1926
Vice Pres. & Gen. Mgr. S. Slater & Sons, Inc., Webster, Mass.		
Lapham, Leonard C.	Ac.	Apr. 25, 1907
Treas. Nonquitt Spinning Co., New Bedford, Mass.		
Lasell, John W.	As.	Feb. 5, 1926
Advertising Mgr. Whitin Machine Works, Whitinsville, Mass.		
Lasell, Josiah M.	As.	Apr. 24, 1895
Whitin Machine Wks., Whitinsville, Mass.		
Latham, Wendell G.	Ac.	June 5, 1925
Supt. Blodgett & Orswell Co., Pawtucket, R. I.		
Lawrence, James	As.	Sept. 30, 1914
McFadden, Sands & Co., 114 Federal St., Boston, Mass.		
Lawrence, John S.	As.	Apr. 30, 1909
Lawrence & Co., 89 Franklin St., Boston, Mass.		
Lawrence & Co.	Sus.	May 31, 1917
John S. Lawrence, Boston, Mass.		
Lawrence Duck Co.	Sus.	Mar. 15, 1918
William L. Barrell, Treas., Lawrence, Mass.		
Lawson, John	As.	Oct. 26, 1918
Pres. Hemphill Co., Pawtucket, R. I.		

		Elected	
Lawson, Ralph	John Malloch & Co., 4 Liberty Sq., Boston, Mass.	As.	Oct. 20, 1917
Lawton Mills Corp., The	S. Harold Greene, Treas., Plainfield, Conn.	Sus.	Nov. 5, 1917
Leach, Joseph T.	Supt. Durfee Mills, Fall River, Mass.	Ac.	Apr. 13, 1911
Leary, Frank J.	Leary & Walker, New Bedford, Mass.	As.	Apr. 16, 1926
Lee, William S.	Vice Pres. Southern Power Co., P. O. Box 600, Charlotte, N. C.	Ac.	Apr. 13, 1911
Leonard, Philip H.	Mgr. Ipswich Mills, Ipswich, Mass.	Ac.	June 14, 1926
Leonard, Russell H.	Treas. Pepperell Mfg. Co., 160 State St., Boston, Mass.	Ac.	Apr. 29, 1915
Leonard, Wardwell C.	Nashawena Mills, New Bedford, Mass.	Tech.	Mar. 2, 1923
Lewis, J. Colby	Supt. Pemaquid Mills, Box 918, New Bedford, Mass.	Ac.	Nov. 13, 1924
Libbey, W. Scott	Treas. W. S. Libbey Co., Lewiston, Me.	Ac.	May 5, 1922
Lincoln Mfg. Co.	Israel Brayton, Treas., Fall River, Mass.	Sus.	July 30, 1917
Lindell, George A.	The Textile Development Co., 80 Federal St., Boston, Mass.	Tech.	Apr. 16, 1926
Lippitt, Henry F.	Gen. Mgr. Manville Co., P. O. Box 130, Providence, R. I.	Ac.	Apr. 27, 1881
Little Androscoggin Water Power Co.	W. E. Winchester, Treas., Auburn, Me.	Sus.	Sept. 18, 1917
Livesey, Edwin V.	Treas. Mt. Hope Spinning Co., 704 Grosvenor Bldg., Providence, R. I.	Ac.	Sept. 17, 1910
Lockwood Co.	William E. Winchester, Waterville, Me.	Sus.	Aug. 10, 1917
Lockwood, Greene & Co., Inc.	Frank W. Reynolds, Vice Pres., Boston, Mass.	Sus.	Sept. 27, 1917
Lockwood, H. deForest	Treas. Bates Mfg. Co., 60 Congress St., Boston, Mass.	Ac.	Apr. 13, 1911
Loftus, William H.	Supt. The Clark Thread Co., Newark, N. J.	Ac.	Oct. 28, 1897
Loper, Ralph E. & Co.	Ralph E. Loper, Pres., Fall River, Mass.	Sus.	Nov. 1, 1923
Loper, Ralph E.	Pres. Ralph E. Loper & Co., Fall River, Mass.	S.R.	Nov. 1, 1923
Lord, Charles E.	Pres. Aberfoyle Mfg. Co., Chester, Pa.	Ac.	May 3, 1921
Lord, Harry D.	Saco-Lowell Shops, 1 Federal St., Boston, Mass.	Ac.	Apr. 27, 1905
Lord, Henry G.	Pres. Bragdon, Lord & Nagle Co., Inc., Boston, Mass.	S.R.	Mar. 1, 1918
Lord, John T.	Supt. Pacific Mills, 215 Haverhill St., Lawrence, Mass.	Ac.	Apr. 28, 1904

		Elected
Lorraine Mfg. Co., James R. MacColl, Pres., Saylesville, R. I.	Sus.	May 24, 1917
Lovering, William M. Treas. Taunton Bleachery & Dye Works, Taunton, Mass.	Ac.	Sept. 27, 1894
Low, J. J. 21 Alger Ave., Hasbrouck Heights, N. J.	As.	May 1, 1924
Lowe, Arthur H. Treas. Parkhill Mfg. Co., Fitchburg, Mass.	Ac.	Oct. 30, 1889
Lowe, David Supt. Parkhill Mfg. Co., Fitchburg, Mass.	Ac.	Apr. 24, 1895
Lowe, John Gen. Mgr. The Montreal Cottons, Ltd., Valleyfield, Quebec, Can.	Ac.	Apr. 28, 1910
Lowe, John Supt. Warwick Mills, Centerville, R. I.	Ac.	Nov. 23, 1925
Lowe, Russell B. Pres. Parkhill Mfg. Co., Fitchburg, Mass.	Ac.	Apr. 25, 1907
Lowe, Stephen C. Pres. S. C. Lowe Supply Co., New Bedford, Mass.	As.	Oct. 25, 1895
Lowe, Stephen C., Jr. 1143 Purchase St., New Bedford, Mass.	As.	Apr. 16, 1926
Lowell, A. Lawrence, LL.D. Pres. Harvard University, 19 Quincy St., Cambridge, Mass.	Hon.	Apr. 30, 1909
Luce, George E. Supt. Beaver Mills, Waterford Plant, Waterford, N. Y.	Ac.	Apr. 28, 1910
Luther Mfg. Co. John H. Holt, Treas., Fall River, Mass.	Sus.	Feb. 1, 1918
Lyall, William L. Chairman of Board, Brighton Mills, Passaic, N. J.	Ac.	Oct. 26, 1892
Lyle, E. T. Vice Pres. Carrier Engineering Corp., 176 Federal St., Boston, Mass.	As.	Mar. 6, 1925
Lyman, Herbert Vice Pres. Merrimack Mfg. Co., P. O. Box 5209, Boston, Mass.	Ac.	Oct. 25, 1895
Lyman Mills Henry L. Sigourney, Asst. Treas., Holyoke, Mass.	Sus.	Dec. 5, 1918
Lynch, Francis Agt. American Mfg. Co., Victory Mills, Victory Mills, N. Y.	Ac.	Jan. 12, 1922
Lynch, T. J. Allis-Chalmers Mfg. Co., 50 Congress St., Boston, Mass.	As.	Sept. 30, 1914
MacColl, James R. Pres. Lorraine Mfg. Co., Pawtucket, R. I.	{ L.	Apr. 24, 1895 Sept. 21, 1905
MacColl, William B. Sec.-Treas. Lorraine Mfg. Co., Pawtucket, R. I.	Ac.	Apr. 13, 1911
MacEnroe, James F. 54 Wilson St., Phillipsburg, N. J.	Ac.	June 1, 1923
MacKinnon, Edward A. du Pont de Nemours, E. I. & Co., Inc., Boston, Mass.	S.R.	Dec. 29, 1917
McBee, William B. Pres. & Treas. Blackstone Mutual Fire Insurance Co., P. O. Box 1525, Providence, R. I.	As.	Aug. 1, 1923

	Elected
McBee, William R. L. Berkshire Cotton Mfg. Co., Adams, Mass.	Ac. Apr. 24, 1923
McCarty, Bernard F. Supt. Manomet Mill No. 1, New Bedford, Mass.	Ac. May 3, 1918
McCaughey, Edward J. 51 Arlington St., Pawtucket, R. I.	Ac. Apr. 26, 1906
McCausland, Ralph E. Barber-Colman Co., Rockford, Ill.	As. Apr. 12, 1911
McCormick, Charles A. Treas. Chicopee Mfg. Corp., Chicopee Falls, Mass.	S.R. Sept. 12, 1917
McCrudden, James F. Aberfoyle Manufacturing Company, Bankers Trust Building, Philadelphia, Pa.	Ac. Apr. 6, 1925
McDaniel, Ira A. Asst. Treas. Goodyear Cotton Mills, Inc., Killingly, Conn.	S.R. Feb. 8, 1918
McDevitt, Frederick H. Agt. Soule Mill, New Bedford, Mass.	Ac. Sept. 17, 1910
McDowell, James 146 Forest St., Medford, Mass.	Ac. May 4, 1920
McDuffie, Charles D. Supt. Everett Mills, Lawrence, Mass.	Ac. Oct. 5, 1923
McDuffie, Frederic C. Treas. Everett Mills, P. O. Box 2934, Boston, Mass.	Ac. Oct. 25, 1882
McElvie, John G. Mgr. Mobile Cotton Mills, 320 Broadway, New York City.	Ac. June 14, 1926
McFadden, George H., & Bro. Isaac R. Thomas, Mgr., Boston, Mass.	Sus. Oct. 29, 1918
McFadden, J. Franklin McFadden, Sands & Co., 115 Chestnut St., Philadelphia, Pa.	As. Sept. 13, 1906
McFadden, Robert C. Supt. Whitman Mills, New Bedford, Mass.	Ac. Nov. 1, 1923
McFadden, Sands & Co. James Lawrence, Boston, Mass.	Sus. June 28, 1918
McGowan, Frank R. Chief of Textile Sec., Bureau of Standards, Dept. of Commerce, Washington, D. C.	Ac. Oct. 5, 1922
McGregor, John A. Vice Pres. & Treas. Utica Steam & Mohawk Valley Cotton Mills, Utica, N. Y.	Ac. Apr. 28, 1910
McHenry, Sidney C. Agent, Otis Company, Ware Mill, Ware, Mass.	Ac. June 14, 1926
McIntyre, Joseph B. 166 President Ave., Providence, R. I.	Ac. Sept. 11, 1912
McKinley, William, Jr. W. H. Langley & Co., 77 Worth St., New York City.	As. Apr. 29, 1915
McKitterick, Edward H. Vice Pres. Seamans & Cobb Co., 206 Essex St., Boston, Mass.	Ac. June 14, 1926
McLoughlin, John E. Pres. McLoughlin Textile Co., Utica, N. Y.	Ac. Apr. 25, 1907
McLoughlin, R. P. Treas. McLoughlin Textile Corp., Utica, N. Y.	Ac. Sept. 13, 1906

		Elected
McMahon, John	Treas. Fort Dummer Mills, Pawtucket, R. I.	S.R. Nov. 15, 1918
McNab, Allan, Jr.	Vice Pres. Lockwood, Greene & Co., 24 Federal St., Boston, Mass.	Ac. Sept. 11, 1912
Macara, Charles W., Bart.	Henry Bannerman & Sons, Ltd., 33 York St., Manchester, Eng.	Ac. Apr. 25, 1907
Macintyre, A. Fergusson	Agt. Maginnis Cotton Mills, New Orleans, La.	Ac. June 15, 1923
Mackay, Rowland N.	77 Summer St., Boston, Mass.	As. Nov. 1, 1923
Mackintosh, Charles E.	Pres. & Treas. D. Mackintosh & Sons Co., Holyoke, Mass.	S.R. Aug. 1, 1923
Mackintosh, D., & Sons Co.	Charles E. Mackintosh, Pres., & Treas., Holyoke, Mass.	Sus. Aug. 1, 1923
Macy, Frederick B.	Frederick B. Macy & Co., 222 Union St., New Bedford, Mass.	Ac. Apr. 25, 1901
Maddox, Amos G.	Supt. Mohawk Valley Cotton Mills, Utica, N. Y.	Ac. Oct. 18, 1900
Main, Charles T.	Mill Engineer, 200 Devonshire St., Boston, Mass.	Ac. Oct. 28, 1885
Mains, Robert	66 Leonard St., New York City.	Ac. Sept. 16, 1916
Makepeace, Alexander	Supt. American Printing Co., Fall River, Mass.	Ac. Oct. 1, 1903
Makepeace, Charles R.	Mill Engineer, P. O. Box 1146, Providence, R. I.	Ac. Apr. 30, 1890
Makepeace, Charles S.	Mill Engineer, P. O. Box 1146, Providence, R. I.	Ac. Feb. 8, 1921
Manley, John Warren	Sayles Bleacheries, 185 Arlington Ave., Providence, R. I.	Ac. Apr. 30, 1909
Manson, Ernest T.	Edward H. Best & Co., 222 Purchase St., Boston, Mass.	As. Oct. 2, 1913
Manville Jenckes Co.	Frederick L. Jenckes, Treas., Pawtucket, R. I.	Sus. Mar. 18, 1918
Marble, C. F.	Curtis & Marble Machine Co., 72 Cambridge St., Worcester, Mass.	As. Mar. 6, 1925
Marble, Edwin H.	Pres. Curtis & Marble Machine Co., Worcester, Mass.	S.R. Apr. 8, 1919
Marble, George Edwin	Curtis & Marble Machine Co., 72 Cambridge St., Worcester, Mass.	As. May 1, 1924
Marble, Herbert H.	Treas. Arkwright Mills, P. O. Box 71, Fall River, Mass.	Ac. Apr. 30, 1890
Marsh, Henry	Atkinson, Haserick & Co., 152 Congress St., Boston, Mass.	As. Apr. 30, 1909
Marston, John P.	247 Atlantic Ave., Boston, Mass.	{ Apr. 28, 1904 L. Apr. 25, 1907
Martin, Edward L.	Sec. H. & B. American Machine Co., P. O. Box 678, Pawtucket, R. I.	As. Apr. 25, 1907
Marvin, Charles R.	Utica Willowvale Bleaching Co., 320 Broadway, New York City.	Ac. Oct. 2, 1913

		Elected
Mason, Albert G.	Treas. Whitman Mills, New Bedford, Mass.	Ac. Apr. 30, 1909
Mason, Frederic R.	2740 Park Ave., San Diego, Calif.	Ac. Sept. 21, 1905
Mason, Henry W.	Henry W. Mason & Co., 13 Market Sq., Providence, R. I.	As. Apr. 27, 1905
Mason, Robert D., Co.	Andrew J. Peters, Pres., Pawtucket, R. I.	Sus. Nov. 1, 1918
Massasoit Mfg. Co.	P. S. Palmer, Treas., Fall River, Mass.	Sus. June 20, 1918
Matos, Louis J.	National Aniline & Chemical Co., 40 Rector St., New York City.	As. Apr. 30, 1914
Mayor, John W.	Thomas Mayor & Son, 26 Olney St., Providence, R. I.	As. Sept. 30, 1908
Mead, Chas. E.	Mgr. Cotton Research Co., 1020 Washington St., Boston, Mass.	Ac. July 15, 1924
Meehan, George V.	Asst. Treas. Warren Manufacturing Co., Providence, R. I.	Ac. Apr. 16, 1926
Mellor, Leonard H.	Supt. National Rhea Co., Putnam, Conn.	Ac. Aug. 3, 1921
Merchant, John S.	Standard Mill Supply Co., P. O. Box 1534, Providence, R. I.	As. Apr. 30, 1914
Merriam, Bernard F.	Treas. Cordaville Woolen Co., Framingham, Mass.	Ac. Apr. 25, 1907
Merriam, Joseph	Pres. Springfield Webbing Co., Middletown, Conn.	Ac. Oct. 2, 1902
Merrimack Mfg. Co.	Ward Thoron, Treas., Lowell, Mass.	Sus. May 10, 1917
Merriman, Chas. H., Jr.	Manville Co., Providence, R. I.	Ac. Apr. 24, 1895
Merriman, James G.	Pres. Oswego Yarn Mills, Inc., Oswego, N. Y.	Ac. Sept. 21, 1905
Merriman, William H.	Mgr. Sauquoit Spinning Co., Utica, N. Y.	Ac. Sept. 30, 1908
Metcalf, Francis	Supt. Putnam Manufacturing Co., Putnam, Conn.	Ac. May 1, 1925
Metz, Herman A.	Pres. H. A. Metz & Co., 122 Hudson St., New York City.	Ac. Apr. 29, 1915
Midgley, Herbert	Pres. & Gen. Mgr. Howard Bros. Mfg. Co., Worcester, Mass.	S.R. Jan. 22, 1918
Millar, J. R.	Gen. Mgr. California Cotton Mills Co., Oakland, Calif.	Ac. Oct. 29, 1918
Miller, Earl	Treas. United States Knitting Co., Pawtucket, R. I.	Ac. June 5, 1925
Miller, Theodore F.	Treas. Stead & Miller Co., 4th & Cambria Sts., Philadelphia, Pa.	Ac. Oct. 4, 1907
Milliken, Albert D.	Agt. Hamilton Mfg. Co., Lowell, Mass.	Ac. Apr. 25, 1907
Milliken, Joseph K.	Treas. Mount Hope Finishing Co., North Dighton, Mass.	Ac. Sept. 23, 1909

		Elected
Milliken, Roscoe S.	Con. Agt. Nashua Mfg. Co., Nashua, N. H.	Ac. Apr. 29, 1896
Minnick, John F.	Supt. Dominion Textile Co., Ltd., Cote St. Paul, Montreal, Quebec, Can.	Ac. Sept. 16, 1916
Minot, Hooper & Co.	Thomas W. Slocum, New York City.	Sus. Jan. 1, 1919
Mitchell, John R.	Pres. & Treas. Mitchell-Bissell Co., 334 Fourth Ave., New York City.	{ Oct. 18, 1900 L. Apr. 27, 1905
Mitchell, Nathaniel M.	Supt. West Boylston Mfg. Co., Easthampton, Mass.	{ Mar. 2, 1922 L. Mar. 2, 1922
Mitchell, Robert L.	Treas. Beaver Mills, 102 Worth St., New York City.	Ac. Aug. 3, 1921
Mitchell, William A.	Treas. Houston Textile Mills, Houston, Texas.	Ac. Apr. 25, 1907
Moller, Kenneth	Hunter Mfg. & Commission Co., 58-60 Worth St., New York City.	Ac. Apr. 29, 1915
Montgomery, George M.	Vice Pres. & Sec. The J. R. Montgomery Co., Windsor Locks, Conn.	Ac. Sept. 22, 1904
Montgomery, J. R.	Pres. The J. R. Montgomery Co., Windsor Locks, Conn.	Ac. Sept. 29, 1898
Montgomery, The J. R. Co.	John R. Montgomery, Pres., Windsor Locks, Conn.	Sus. July 17, 1917
Moody, Chas. P.	Supt. Fisher Mfg. Co., Fisherville, Mass.	Ac. Jan. 30, 1925
Moore, W. F.	Treas. Hill Mfg. Co., 30 State St., Boston, Mass.	{ Mar. 2, 1922 L. Mar. 2, 1922
Moore, Wm. L.	Mgr. Alexander Sprunt & Son, Inc., 45 Franklin St., Boston, Mass.	As. Oct. 18, 1923
Morrill, Ernest L.	Saco, Me.	Ac. Apr. 28, 1910
Morris, Edward N.	The Lawton Mills Corp., 56 Worth St., New York City.	Ac. May 3, 1918
Morris, Lindsey	The Ballinger Co., 12th & Chestnut Sts., Philadelphia, Pa.	As. May 3, 1921
Morrissey, J. F.	Supt. Interlaken Mills, Harris, R. I.	Ac. May 1, 1925
Morse Chain Co.	F. L. Morse, Pres., Ithaca, N. Y. John S. White, Boston, Mass.	Sus. Nov. 1, 1920
Morse, F. L.	Pres. Morse Chain Co., Ithaca, N. Y.	S.R. Nov. 1, 1920
Morton, Albert H.	95 Harvard St., Lowell, Mass.	Ac. Oct. 28, 1891
Morton, Charles	32 Garden St., Pawtucket, R. I.	Ac. May 3, 1918
Motley, Edward	Curtis & Sanger, 33 Congress St., Boston, Mass.	As. Apr. 29, 1915
Mowry, Harold	Mgr. Sterling Branch, U. S. Finishing Co., Sterling, Conn.	Ac. Apr. 27, 1905

		Elected	
Munro, James, Jr.	As.	Oct. 5, 1920	
c/o J. H. Hanaford, 89 State St., Boston, Mass.			
Murphy, Wilfred C.	As.	Mar. 2, 1923	
Pres. & Treas. Providence Mill Supply Co., 68 West Exchange St., Providence, R. I.			
Murray, Joseph D.	Ac.	Apr. 16, 1926	
Asst. Treas. Holmes Mfg. Co., New Bedford, Mass.			
Murti, E. N.	{	Apr. 25, 1912	
Tanuku, West Godarari Dist., Pres'y Madras, India.	L.	Apr. 25, 1912	
Narragansett Mills	Sus.	Aug. 12, 1918	
Isaac A. Brown, Treas., Fall River, Mass.			
Nashua Mfg. Co.	Sus.	Aug. 11, 1917	
Frederick Amory, Treas., Nashua, N. H.			
National Aniline & Chemical Co.	Sus.	Jan. 17, 1918	
W. M. Vernilye, Executive Vice Pres., New York City.			
Naumburg, Robert E.	As.	Apr. 6, 1923	
Pres. Ren Mfg. Co., Winchester, Mass.			
Naumkeag Steam Cotton Co.	Sus.	Aug. 2, 1917	
Nathaniel G. Simonds, Treas., Salem, Mass.			
Neff, Robert W.	{	Apr. 24, 1902	
22 India Sq., Boston, Mass.	L.	Apr. 28, 1904	
Neild, Eli	Ac.	June 14, 1926	
Asst. Supt. Nashawena Mills, New Bedford, Mass.			
Neild, Frank I.	Ac.	May 3, 1918	
Pres. Neild Mfg. Corp., New Bedford, Mass.			
Nelson, E. K.	{	May 3, 1918	
Pres. Ridley Park National Bank, Ridley Park, Philadelphia, Pa.	L.	June 15, 1918	
New Bedford Spinning Co.	Sus.	Apr. 16, 1926	
John Catterall, Agent, New Bedford, Mass.			
Newburger, Joseph	As.	Sept. 11, 1915	
Newburger Cotton Co., 912 Falls Bldg., Memphis, Tenn.			
Newburger, Samuel	As.	May 4, 1920	
Samuel Newburger & Co., 60 Beaver St., New York City.			
Newell, A. W.	As.	May 5, 1919	
Sec. Hazard Cotton Co., P. O. Box 1394, Providence, R. I.			
Newell, Charles H.	Ac.	Dec. 1, 1921	
Asst. Treas. Baltic Mills Co., 510 Turks Head Bldg., Providence, R. I.			
New England Southern Mills	Sus.	Nov. 5, 1917	
S. Harold Greene, Pres., Boston, Mass.			
Newington, John	As.	Apr. 16, 1926	
New Bedford, Mass.			
Newmarket Mfg. Co.	Sus.	Dec. 16, 1918	
Charles Walcott, Treas., Newmarket, N. H.			
Newport Chemical Wks., Inc.	Sus.	Nov. 10, 1919	
Elvin H. Killheffer, Vice Pres., Passaic, N. J.			
Newton, Henry Arthur	Ac.	Apr. 24, 1923	
Supt. Pacific Mills, Cocheco Dept., Dover, N. H.			
Newton, J. Edward	Ac.	Sept. 16, 1916	
Treas. Barnard Mfg. Co., Fall River, Mass.			

		Elected
New York Mills Corp.		
A. F. Hobbs, Vice Pres., New York Mills, N. Y.	Sus.	Feb. 10, 1920
Nichols, Burt F.		
Pask & Walbridge, 14 Wall St., New York City.	As.	Dec. 5, 1918
Nichols, Charles B.		
Treas. Thorndike Co., 24 Milk St., Boston, Mass.	Ac.	Oct. 14, 1925
Nichols, F. W., Jr.		
Treas. Nobska Spinning Co., Taunton, Mass.	Ac.	Feb. 14, 1920
Nichols, George		
Minot, Hooper & Co., 11 Thomas St., New York City.	Ac.	Sept. 11, 1916
Nichols, George		
Treas. Dwight Mfg. Co., Chicopee, Mass.	S.R.	Dec. 5, 1918
Nichols, Henry G.		
Treas. Otis Co., 24 Milk St., Boston, Mass.	Ac.	June 1, 1923
Nichols, Henry W.		
Principal, Bradford Durfee Textile School, Durfee and Banks Sts., Fall River, Mass.	Ac.	Oct. 20, 1917
Nichols, Howard S. O.		
Treas. Great Falls Mfg. Co., 53 State St., Boston, Mass.	Ac.	Sept. 29, 1911
Nichols, Rodman A.		
Nichols & Read, 73 Water St., Boston, Mass.	As.	May 3, 1918
Nichols, William G.		
Vice Pres. & Gen. Mgr. Griffin Mfg. Co., Griffin, Ga.	Ac.	Oct. 25, 1893
Nivling, W. A.		
Huron Milling Co., 73 Tremont St., Boston, Mass.	As.	May 4, 1920
Nobska Spinning Co.		
F. W. Nichols, Jr., Treas., Taunton, Mass.	Sus.	Jan. 12, 1918
Noone, Albert W.		
Joseph Noone's Sons Co., Peterboro, N. H.	Ac.	Sept. 26, 1901
Noone, William R.		
Joseph Noone's Sons Co., 105 Washington St., Boston, Mass.	As.	Oct. 28, 1897
Norton, Arthur L.		
Special Products Co., 261 Franklin St., Boston, Mass.	As.	June 19, 1919
Nyanza Mills		
Nathaniel F. Ayer, Treas., Woonsocket, R. I.	Sus.	Jan. 14, 1919
Nye, William H.		
Turner Construction Co., 178 Tremont St., Boston, Mass.	As.	July 23, 1919
Odenheimer, S.		
Pres. Lane Cotton Mills Co., New Orleans, La.	Ac.	Oct. 25, 1893
O'Leary, Arthur L.		
Treas. Lambeth Rope Corp., New Bedford, Mass.	As.	Apr. 16, 1926
O'Malley, Charles J.		
Pres. O'Malley Advertising & Selling Co., 244 Washington St., Boston, Mass.	{ L.	Apr. 24, 1913 Sept. 7, 1913
O'Meara, James J.		
Supt. Fitchburg Yarn Company, Fitchburg, Mass.	Ac.	Nov. 13, 1924
Osborn, James E.		
Treas. Merchants Mfg. Co., Fall River, Mass.	Ac.	Apr. 27, 1916
Oswald, John G.		
Agt. Nyanza Mills, Woonsocket, R. I.	Ac.	June 1, 1923

		Elected	
Otis Company		Sus.	Nov. 12, 1917
Henry G. Nichols, Treas., Boston, Mass.			
Otte, Henry		Ac.	May 3, 1921
General Mgr. & Asst. Treas. The Ninigret Co., Pawtucket, R. I.			
Otto, Hans		Ac.	Oct. 3, 1924
c/o Heinrich Otto, Heichenbach, a.d. Fils, Wuerttemberg, Germany.			
Owen, Charles D.		S.R.	Nov. 7, 1917
Treas. Beacon Mfg. Co., New Bedford, Mass.			
Owen, Harry C.		As.	May 1, 1925
Vice Pres. Industrial Trust Co., Providence, R. I.			
Pacific Mills		Sus.	May 18, 1917
Edwin Farnham Greene, Treas., Lawrence, Mass.			
Paige, Walter H.		Ac.	Nov. 23, 1925
Supt. Maverick Mills, E. Boston, Mass.			
Paine, Sidney B.¹		Hon.	Apr. 16, 1926
52 Institution Ave., Newton Centre, Mass.			
Paine, Sidney S.		Ac.	Apr. 27, 1916
Pres. The Textile Development Co., 80 Federal St., Boston, Mass.			
Palmer, Edward E.		As.	June 2, 1922
General Electric Co., 84 State St., Boston, Mass.			
Palmer, P. S.		S.R.	June 20, 1918
Treas. Massasoit Mfg. Co., Fall River, Mass.			
Palmer, Townsend		Ac.	Apr. 30, 1909
Sec.-Treas. The I. E. Palmer Co., Middletown, Conn.			
Park, Clifton D.		As.	Oct. 29, 1918
The Cooling & Air Conditioning Corp., 31 Union Sq., West, New York City.			
Parker, J. Earle		Ac.	Feb. 2, 1923
Treas. Acadia Mills, 78 Chauncy St., Boston, Mass.			
Parker, Wilder & Co.		Sus.	Nov. 23, 1918
Wm. D. Judson, New York City.			
Parker, Winthrop		Ac.	Sept. 30, 1908
Supt. Cotton Mfg. Amoskeag Mfg. Co., Manchester, N. H.			
Parkhill Mfg. Co.		Sus.	May 11, 1917
Warner M. Allen, Asst. Treas., Fitchburg, Mass.			
Parks-Cramer Co.		Sus.	May 11, 1917
R. S. Parks, Treas., Fitchburg, Mass.			
Parks, R. S.		S.R.	May 11, 1917
Parks-Cramer Co., Fitchburg, Mass.			
Parsons, Brackett		Ac.	Apr. 24, 1923
Asst. to Treas. Ipswich Mills, 160 State St., Boston, Mass.			
Parsons, Winslow A.		Ac.	May 3, 1918
Treas. Richmond Lace Wks., 60 Congress St., Boston, Mass.			
Patterson, John L.		Ac.	Apr. 13, 1911
P. O. Box 1481, Richmond, Va.			
Patterson, Samuel F.		Ac.	Oct. 18, 1900
Treas. Roanoke Mills Co., Roanoke Rapids, N. C.			
Payne, George F.		Ac.	Apr. 28, 1910
172 So. Main St., Putnam, Conn.			

¹ Member of the Association since April 24, 1895.

		Elected	
Payson, C. C.	Clark, Payson & Co., 19 Pearl St., Boston, Mass.	As.	Sept. 30, 1914
Peabody, W. Rodman	Treas. Suncook Mills, Suncook, N. H.	S.R.	Aug. 1, 1923
Pearson, John A.	The Esmond Mills, 21 East 26th St., New York City.	Ac.	Apr. 30, 1914
Peck, Edwin R.	Vice Pres. Gardiner Hall, Jr. Co., South Willington, Conn.	Ac.	June 14, 1926
Pedler, William A.	Agt. Acadia Mills, Lawrence, Mass.	Ac.	Apr. 30, 1914
Peirce, William C.	Pres. Elizabeth Mills, Hills Grove, R. I.	Ac.	Apr. 24, 1895
Pennock, Gilbert V.	Eustis, Pennock & Co., 118 Old Colony Ave., Wollaston, Mass.	As.	Sept. 11, 1915
Penrose, Charles	Asst. Gen. Mgr. Day & Zimmermann, Inc., Philadelphia, Pa.	S.R.	Oct. 15, 1920
Pepler, Herbert H.	Agt. Paco Mfg. Co., Danielson, Conn.	Ac.	June 5, 1925
Pepperell Mfg. Co.	Russell H. Leonard, Treas., Biddeford, Me.	Sus.	Dec. 17, 1917
Pepperell, William S.	Treas. Warren Mfg. Co., P. O. Box 1384, Providence, R. I.	Ac.	Mar. 2, 1922
Perkins, Allan M.	Treas. Renfrew Mfg. Co., Adams, Mass.	S.R.	Sept. 5, 1917
Perkins, John A.	Agt. Harmony Mills, Cohoes, New York.	Ac.	Apr. 28, 1910
Perkins, Ralph C.	Stafford Mills, Fall River, Mass.	Ac.	Apr. 26, 1910
Peters, Andrew J.	Pres. Robert D. Mason Co., Pawtucket, R. I.	S.R.	Nov. 1, 1918
Peugnet, Ramsay	Sec. & Treas. U. S. Testing Co., Inc., 340 Hudson St., New York City.	Ac.	Apr. 17, 1908
Phillips, William D.	Supt. Naumkeag Steam Cotton Co., 347 Lafayette St., Salem, Mass.	Ac.	Apr. 30, 1914
Pierce, Albert R.	Supt. Pierce Mfg. Corp., New Bedford, Mass.	Ac.	Oct. 5, 1899
Pierce, Andrew G., Jr.	Treas. Pierce Mfg. Corp., P. O. Box 733, New Bedford, Mass.	Ac.	Apr. 23, 1895
Pierce Mfg. Corp.	Andrew G. Pierce, Jr., Treas., New Bedford, Mass.	Sus.	Dec. 3, 1917
Pilgrim Mills	Arthur C. Homer, Treas., Fall River, Mass.	Sus.	July 17, 1917
Pinckney, Henry R.	Supt. Lincoln Bleachery & Dye Works, Lonsdale, R. I.	Ac.	June 14, 1926
Pingree, A. E.	Supt. Ponemah Mills, Taftville, Conn.	Ac.	Apr. 4, 1924
Plunkett, Charles T.	Pres. Berkshire Cotton Mfg. Co., Adams, Mass.	Ac.	Apr. 28, 1897
Pocasset Mfg. Co.	W. Frank Shove, Treas., Fall River, Mass.	Sus.	June 6, 1917

	Elected
Pond Lily Co., The William C. Harmon, Pres., New Haven, Conn.	Sus. Aug. 21, 1917
Ponemah Mills J. Arthur Atwood, Treas., Taftsville, Conn.	Sus. Mar. 18, 1918
Porteous, John Pres. The Lawton Mills Corp., Plainfield, Conn.	Ac. May 3, 1918
Potomska Mills Corp. Chas. E. Brady, Treas., New Bedford, Mass.	Sus. Nov. 21, 1918
Potter, Carl H. Res. Mgr., Green River Mfg. Co., Tuxedo, N. C.	Ac. Nov. 5, 1918
Potter, Charles H. Gen. Supt. The Montreal Cottons, Ltd., Valleyfield, Quebec, Can.	Ac. Apr. 25, 1901
Pratt, Edward S. Vice Pres. Samson Cordage Wks., 88 Broad St., Boston, Mass.	As. Apr. 26, 1917
Prentice, Robert W. Treas. Butler, Prentice & Co., Inc., 320 Broadway, New York City.	Ac. Apr. 24, 1913
Prest, George E. Agt. Suncook Mills, Suncook, N. H.	Ac. Apr. 24, 1902
Pritchett, Henry Smith, LL.D. The Carnegie Foundation, 522 Fifth Ave., New York City.	Hon. Sept. 26, 1901
Prosser, Isaac T. Mgr. Chicopee Mfg. Corp., Chicopee Falls, Mass.	Ac. Apr. 25, 1912
Providence Dyeing, Bleaching & Calendering Co. John P. Farnsworth, Pres., Providence, R. I.	Sus. Oct. 29, 1918
Queen City Cotton Co. Andrew McLean Young, Treas., Burlington, Vt.	Sus. Apr. 24, 1918
Quinebaug Co., The Frank B. Ricketson, Asst. Treas., Danielson, Conn.	Sus. Sept. 10, 1918
Quinn, Frederick J. Treas. Atlas Yarn Co., 161 Devonshire St., Boston, Mass.	Ac. Apr. 26, 1906
Quinn, Patrick H. Treas. Warwick Lace Wks., Riverpoint, R. I.	Ac. May 3, 1918
Quinton, W. W. Agt. Lockwood Co., Waterville, Me.	Ac. June 15, 1923
Quissett Mill Edward H. Cook, Treas., New Bedford, Mass.	Sus. Feb. 9, 1918
Rae, Benjamin G. Treas. Futurity Thread Co., 80 Bridge St., Newton, Mass.	Ac. Apr. 29, 1915
Raeburn, Andrew Sec. New Bedford Cotton Mfrs. Assn., Masonic Bldg., New Bedford, Mass.	Ac. Apr. 24, 1923
Ramsdell, Theodore E. Agt. Monument Mills, Housatonic, Mass.	Ac. Apr. 23, 1903
Rawlinson, M. A. Agt. Tremont and Suffolk Mills, Lowell, Mass.	Ac. Apr. 24, 1895
Raymond, Charles P. C. P. Raymond Agency, Inc., 294 Washington St., Boston, Mass.	As. Apr. 29, 1915
Read, Charles O. Pres. Sayles Finishing Plants, 63 Summit St., Pawtucket, R. I.	Ac. Sept. 21, 1905

		Elected
Reardon, John F. Agt. Grosvenor-Dale Co., No. Grosvenor-Dale, Conn.	Ac.	Sept. 8, 1922
Redman, H. Stewart Agt. Palmer Mills, Three Rivers, Mass.	Ac.	Apr. 27, 1916
Renfrew Mfg. Co. Allan M. Perkins, Treas., Adams, Mass.	Sus.	Sept. 5, 1917
Rennie, T. H. Vice Pres. Avondale Mill, Pell City, Ala.	Ac.	Oct. 18, 1900
Reoch, Robert A. S. Supt. Pacific Mills, Print Works Dept., Lawrence, Mass.	Ac.	Sept. 17, 1910
Reynolds, Arthur W. Lockwood, Greene & Co., Inc., 24 Federal St., Boston, Mass.	As.	June 14, 1926
Reynolds, Frank W. Vice Pres. Lockwood, Greene & Co., Inc., Boston, Mass.	S.R.	Sept. 27, 1917
Reynolds, Frederic W. 25 Walnut St., Stoughton, Mass.	Ac.	Apr. 26, 1900
Rice, Raymond A. Treas. Southbridge Printing Co., Southbridge, Mass.	Ac.	Oct. 20, 1917
Richardson, Charles O. Treas. Warwick Mills, 49 Federal St., Boston, Mass.	Ac.	Apr. 25, 1912
Richardson, E. R. Treas. H & B American Machine Co., P. O. Box, 678, Pawtucket, R. I.	Ac.	Apr. 13, 1911
Richardson, Harry Supt. Aldrich Bros. Co., Moosup, Conn.	Ac.	Nov. 3, 1921
Richmond, Lawrence Asst. Treas. Crompton Company, Arctic, R. I.	Ac.	Jan. 30, 1925
Ricketson, Frank B. Asst. Treas. The Quinebaug Co., Providence, R. I.	Ac.	Apr. 13, 1911
Riley, Charles E. Pres. H & B American Machine Co., 200 Devonshire St., Boston, Mass.	Ac.	Apr. 25, 1888
Riley, Richard G. Supt. King Philip Mills, Fall River, Mass.	Ac.	Apr. 25, 1907
Ritter, William H. Asst. Sec. Chicopee Mfg. Corp., 266 George St., New Brunswick, N. J.	{ L.	May 3, 1918 June 15, 1918
Rivinius, George A. G. A. Rivinius & Co., 53 State St., Boston, Mass.	As.	Jan. 11, 1924
Robbins, Charles H. Supt. Manomet Mill, No. 4, New Bedford, Mass.	Ac.	May 3, 1918
Roberts, George N. Vice Pres., Bemis Bro. Bag Co., Boston, Mass.	S.R.	June 6, 1917
Roberts, Joseph P. O. Box 309, Fall River, Mass.	Ac.	May 3, 1918
Robertson, George W. Gen. Supt. Riverside & Dan River Cotton Mills, Danville, Va.	Ac.	Apr. 26, 1906
Robertson, William H. Treas. The Robertson Bleachery & Dye Wks., Inc., New Milford, Conn.	Ac.	Sept. 16, 1916
Robinson, C. M. Agt. The Wauregan Co., Wauregan, Conn.	Ac.	June 29, 1920

		Elected
Rockwell, Foster	Bankers Trust Company, New York City.	As. Mar. 6, 1925
Rockwood, George I.	Rockwood Sprinkler Co., 38-56 Harlow St., Worcester, Mass.	{ Apr. 25, 1901 L. Apr. 25, 1901
Rodman, Lee	Pres. & Treas. Indiana Cotton Mills, Cannelton, Ind.	Ac. Sept. 17, 1910
Rogers, Leon B.	Treas. Rogers Fibre Co., 121 Beach St., Boston, Mass.	As. Oct. 19, 1917
Rooney, George W.	Supt. New Hampshire Spinning Mills, 31 Canal St., Penacook, N. H.	Ac. Sept. 30, 1914
Rousmaniere, John E.	Lawrence & Co., 24 Thomas St., New York City.	Ac. Apr. 13, 1911
Rowe, F. E., Jr.	Saco-Lowell Shops, 1 Federal St., Boston, Mass.	As. Apr. 24, 1923
Rowley, Frank G.	Treas. Seakonk Lace Co., 260 Central Ave., Pawtucket, R. I.	{ Oct. 20, 1917 L. Nov. 20, 1917
Royal Mfg. Co.	Ira A. Stone, Vice Pres., Rahway, N. J.	Sus. Nov. 13, 1924
Rudloff, John A.	Whitman Mills, New Bedford, Mass.	Ac. June 5, 1925
Rusden, E. A.	Pres. The Textile-Finishing Machinery Co., 83 Exchange Pl., Providence, R. I.	As. Sept. 21, 1905
Russell, Howard I.	Treas. & Mgr. Russell Mfg. Co., Manchester, N. H.	Ac. Apr. 13, 1911
Saco-Lowell Shops	Frank J. Hale, Lowell, Mass.	Sus. May 18, 1917
Safford, Arthur Truman	66 Broadway, Lowell, Mass.	Ac. Nov. 12, 1919
Sagar, Alfred	Treas. Bolton Worsted Mill, Inc., Methuen, Mass.	Ac. Apr. 24, 1902
St. Amant, George W.	141 Milk St., Boston, Mass.	As. Oct. 4, 1907
Salisbury, Everett E.	Agt. Atlantic Mills, Providence, R. I.	Ac. Sept. 30, 1908
Sanborn, W. K.	Supt. American Net & Twine Co., R. W. Lord Mill, West Kennebunk, Me.	Ac. Apr. 25, 1907
Sanderson & Porter	F. G. Coburn, Mgr., New York City.	Sus. Dec. 7, 1923
Sands, Harold A.	McFadden, Sands & Co., 115 Chestnut St., Philadelphia, Pa.	As. Apr. 29, 1915
Sanford, Pardon B.	Supt. Chalmers Knitting Co., Amsterdam, N. Y.	Ac. Oct. 2, 1902
Schaellibaum, Robert	310 N. Church St., Charlotte, N. C.	{ Sept. 22, 1904 L. Sept. 22, 1907
Schloss, Frederick H.	Pres. & Gen. Mgr. Darlington Textile Co., Pawtucket, R. I.	Ac. Jan. 11, 1926
Schofield, James	89 Broad St., Valley Falls, R. I.	Ac. May 4, 1920

		Elected	
Scott, Albert L.	Vice Pres. Lockwood, Greene & Co., Inc., 24 Federal St., Boston, Mass.	Ac.	Sept. 11, 1912
Scott, David C.	Henry L. Scott & Co., P. O. Box 963, Providence, R. I.	As.	May 4, 1920
Seabury, Arthur G.	Treas. New Bedford Shuttle Co., New Bedford, Mass.	As.	Apr. 16, 1926
Seabury, Dwight	Dwight Seabury Co., 12 East Ave., Pawtucket, R. I.	As.	Apr. 25, 1901
Seaton, Thomas J.	Vice Pres. & Supt. The Floyd Cranska Co., Moosup, Conn.	Ac.	Nov. 1, 1923
Sergeson, Allan M.	R. Sergeson & Co., Philadelphia, Pa.	As.	June 5, 1925
Seydel, Hermann	Pres. Seydel Chemical Co., 86 Forrest St., Jersey City, N. J.	Ac.	Apr. 28, 1910
Shaw, A. F.	Pres. Greenville Finishing Co., Greenville, R. I.	S.R.	June 14, 1926
Shaw, Benjamin C.	Supt. Boston Duck Co., Bondsville, Mass.	Ac.	Oct. 29, 1918
Shaw, John F.	Supt. Great Falls Mfg. Co., Somersworth, N. H.	Ac.	Apr. 16, 1926
Shawmut Mills	Richard B. Chace, Treas., Fall River, Mass.	Sus.	Dec. 3, 1918
Sheldon, Arthur N.	F. P. Sheldon & Son, 1009 Hospital Trust Bldg., Providence, R. I.	As.	Sept. 13, 1906
Shelters, Ernest E.	Supt. Tremont & Suffolk Mills, Lowell, Mass.	Ac.	Apr. 30, 1909
Shove, W. Frank	Treas. Pocasset Mfg. Co., Fall River, Mass.	Ac.	Sept. 22, 1904
Sigourney, Henry L.	Asst. Treas., Lyman Mills, Holyoke, Mass.	S.R.	Dec. 5, 1918
Simonds, Henry G.	Pacific Mills, 24 Federal St., Boston, Mass.	Ac.	Apr. 16, 1926
Simonds, Nathaniel G.	Treas. Naumkeag Steam Cotton Co., Salem, Mass.	Ac.	Apr. 27, 1898
Sinclair, James	Treas. Charlton Mills, Fall River, Mass.	S.R.	Jan. 14, 1919
Skinner, John	Treas. Harmony Mills, Cohoes, N. Y.	Ac.	Apr. 26, 1906
Slade, Abbott E.	863 High St., Fall River, Mass.	Ac.	Oct. 25, 1893
Slater, S., & Sons, Inc.	H. Nelson Slater, Pres., Webster, Mass.	Sus.	June 6, 1924
Slater, H. Nelson	Pres. S. Slater & Sons, Inc., Webster, Mass.	S.R.	June 6, 1924
Slocum, Charles P.	Corn Products Refining Co., New York City.	S.R.	Mar. 2, 1918
Slocum, Thomas W.	Minot, Hooper & Co., New York City.	S.R.	Jan. 1, 1919

	Elected
Smith, Abbott M. 420 Acushnet Ave., New Bedford, Mass.	As. Apr. 24, 1923
Smith, Abbott P. 791 Purchase St., New Bedford, Mass.	As. Sept. 13, 1906
Smith, Albert E. Agt. New Bedford & Agawam Finishing Co., East Wareham, Mass.	Ac. Dec. 7, 1923
Smith, Albert G. Agt. Grant Yarn Co., Fitchburg, Mass.	Ac. Apr. 30, 1909
Smith, Alphonso H. Prop. Slocum & Kilburn, 23-27 No. Water St., New Bedford, Mass.	As. Apr. 6, 1923
Smith, Archer J. Pres. The American Mills Co., Waterbury, Conn.	Ac. Apr. 26, 1906
Smith, D. Allen Mgr. Alexander Sprunt & Son, Inc., Boston, Mass.	S.R. Oct. 18, 1923
Smith, Frederick K. Supt. Cotton Dept., Ipswich Mills, Ipswich, Mass.	Ac. Apr. 24, 1923
Smith, Henry Kay 500 East 6th St., Jamestown, N. Y.	Ac. Oct. 4, 1907
Smith, J. Foster Agt. Naumkeag Steam Cotton Co., Salem, Mass.	Ac. May 3, 1918
Smith, Joseph J. Firth-Smith Co., P. O. Box 5114, Boston, Mass.	As. Sept. 11, 1912
Smith, Robert P. Smith, Drum & Co., Alleghany Ave. & 5th St., Philadelphia, Pa.	As. Apr. 24, 1923
Smith, Thomas Henry 500 East 6th St., Jamestown, N. Y.	Ac. Apr. 30, 1884
Smith, William Prin. New Bedford Textile School, New Bedford, Mass.	Ac. May 3, 1921
Smyth, Ellison A. Hendersonville, N. C.	Ac. Apr. 13, 1911
Sneddon, George Supt. Grinnell Mfg. Corp., New Bedford, Mass.	Ac. Apr. 25, 1912
Soucy, Ernest W. Saco-Lowell Shops, 1 Federal St., Boston, Mass.	As. Apr. 6, 1923
Soule Mill Fred H. McDevitt, Agent, New Bedford, Mass.	Sus. Nov. 27, 1918
Soule, Rufus A., Jr. Treas. Soule Mill, New Bedford, Mass.	Ac. Apr. 26, 1906
Southworth, Irving Agt. Pacific Mills, Lawrence, Mass.	Ac. Apr. 13, 1911
Spence, Henry C. Indian Orchard, Mass.	As. Apr. 24, 1895
Spencer, Antonio Pres. U. S. Ring Traveler Co., 341 Butler Exchange Bldg., Providence, R. I.	Ac. May 3, 1918
Spofford, George E. Vice Pres. Langley Mills, Langley, S. C.	Ac. Apr. 29, 1896
Sprunt, Alexander & Son, Inc. D. Allen Smith, Mgr., Boston, Mass.	Sus. Oct. 18, 1923
Stackhouse, Clarence D. C. D. Stackhouse, 19-21 College St., Providence, R. I.	As. Nov. 13, 1924

		Elected
Stafford Co., The	Sus.	Apr. 1, 1918
George P. Erhard, Pres., Boston, Mass.		
Stanton, J. E., Jr.	S.R.	Nov. 21, 1918
Treas. Hathaway Mfg. Co., New Bedford, Mass.		
Staples, Willard F.	Ac.	Apr. 16, 1926
Wamsutta Mills, New Bedford, Mass.		
Stark Mills	Sus.	June 1, 1923
F. Hartwell Greene, Treas., Boston, Mass.		
Stearns, Frances U.	Ac.	Apr. 30, 1909
Vice Pres. Renfrew Mfg. Co., Adams, Mass.		
Stearns, George R.	Ac.	Apr. 30, 1890
Pres. Riverside Mills, Augusta, Ga.		
Stearns, Walter H.	Ac.	May 5, 1922
P. O. Box 475, Pawtucket, R. I.		
Steele, Fred W.	Ac.	Sept. 11, 1912
Treas. Tremont & Suffolk Mills, Boston, Mass.		
Steele, George F.	As.	Sept. 17, 1910
Dist. Mgr. P. & M. Dept., General Electric Co., 84 State St., Boston, Mass.		
Steere, Robert E.	Ac.	July 10, 1925
Supt. Lorraine Mfg. Co., 84 Olive St., Pawtucket, R. I.		
Steere, Samuel A.	Ac.	Oct. 5, 1920
Mgr. Cotton & Fabric, The Goodyear Tire & Rubber Co., Akron, Ohio.		
Steinbach, Winthrop E.	Ac.	Aug. 3, 1921
14 Greenwood Court, Utica, N. Y.		
Stevens, Dexter	Ac.	Apr. 25, 1907
Mgr. The Esmond Mills, Esmond, R. I.		
Stevens, John A.	Ac.	Apr. 25, 1907
Consulting Engineer, 16 Shattuck St., Lowell, Mass.		
Stevens Mfg. Co.	Sus.	Aug. 20, 1917
Charles B. Chase, Gen. Mgr., Fall River, Mass.		
Stevenson, T. B.	Ac.	Apr. 26, 1900
Gen. Mgr. The Henrietta Mills, Caroleen, N. C.		
Stewart, Samuel	Ac.	Apr. 23, 1903
Agt. Bates Mfg. Co., Lewiston, Me.		
Stiles, Walter F.	Ac.	Sept. 23, 1909
Treas. Orswell Mills, Fitchburg, Mass.		
Stimpson, Wallace I.	As.	Sept. 21, 1905
Agt. Draper Corp., Hopedale, Mass.		
Stoddard, Wallace E.	Ac.	June 29, 1920
Asst. Treas. Berkshire Cotton Mfg. Co., Adams, Mass.		
Stokes, Edward C.	Hon.	Sept. 21, 1905
Trenton, N. J.		
Stone, Ira A.	S.R.	Nov. 13, 1924
Vice Pres. Royal Mfg. Co., Rahway, N. J.		
Stone, Malcolm B.	Ac.	Apr. 25, 1912
Treas. Ludlow Mfg. Associates, 80 Federal St., Boston, Mass.		
Storror, Charles & Co.	Sus.	Mar. 6, 1925
Edward C. Storror, Boston, Mass.		

		Elected
Storrow, E. C.	Charles Storrow & Co., Boston, Mass.	S.R. Mar. 6, 1925
Strang, James	Saco-Lowell Shops, 1 Federal St., Boston, Mass.	As. Oct. 28, 1897
Straw, Herman F.	Cons. Engineer, Amoskeag Mfg. Co., Manchester, N. H.	Ac. Oct. 28, 1885
Straw, William Parker	Agt. Amoskeag Mfg. Co., Manchester, N. H.	Ac. Oct. 4, 1907
Strongman, John B.	Treas. City Mfg. Corp., New Bedford, Mass.	Ac. Apr. 26, 1917
Sturtevant, Harold B.	Supt. Waltham Bleachery and Dye Works, Waltham, Mass.	Ac. Oct. 3, 1924
Sullivan, John	Agt. Taber Mill, New Bedford, Mass.	Ac. Apr. 27, 1899
Sullivan, Timothy,	314 Cory St., Fall River, Mass.	Ac. Apr. 27, 1899
Summersby, George	Amory, Browne & Co., 48 Franklin St., Boston, Mass.	Ac. Sept. 21, 1925
Suncook Mills	W. Rodman Peabody, Treas., Suncook, N. H.	Sus. Aug. 1, 1923
Sutton, E. V.	Treas. Hansahoe Mfg. Co., Valley Falls, R. I.	S.R. Nov. 8, 1918
Sweet, Chas. A.	Wellington, Sears & Co., 93 Franklin St., Boston, Mass.	Ac. Sept. 21, 1925
Sweetser, John A.	Bliss, Fabyan & Co., 45 Franklin St., Boston, Mass.	Ac. June 5, 1925
Swift, Arthur Clinton	Gen. Mgr. Sharp Manufacturing Co., New Bedford, Mass.	Ac. Apr. 6, 1923
Swift, E. Kent	Treas. Whitin Machine Works, Whitinsville, Mass.	S.R. Nov. 1, 1918
Swope, Gerard	Pres. General Electric Co., New York City.	S.R. May 24, 1917
Taber, Frederick	Pres. Taber Mill, New Bedford, Mass.	Ac. Apr. 26, 1906
Taber Mill	John Sullivan, Agent, New Bedford, Mass.	Sus. May 17, 1917
Tabor, Charles A.	Agent Cordis Mills, Millbury, Mass.	Ac. Apr. 27, 1905
Taft, Robert W.	Treas. Coventry Co., P. O. Box 1364, Providence, R. I.	Ac. Sept. 27, 1894
Takatsuji, Narazo	Karasumaru-dori Imadegawaagaru, Kyoto, Japan.	Ac. Apr. 17, 1908
Tarr, Henry M.	Traffic Mgr. Cotton Piece Goods Traffic Assn., 13 Market Sq., Providence, R. I.	Ac. June 2, 1922
Taylor, Daniel L.	Traffic Mgr. Pacific Mills, 24 Federal St., Boston, Mass.	Ac. June 2, 1922
Taylor, Havila B.	Supt. Cotton Dept. Pacific Mills, 193 Bailey St., Lawrence, Mass.	Ac. Oct. 29, 1918

	Elected	
Taylor, James W. Agt. Fuld & Hatch Knitting Co., P. O. Box 144, Cohoes, N. Y.	Ac. Oct. 26, 1892	
Taylor, Samuel Supt. Bristol Mfg. Co., New Bedford, Mass.	Ac. Oct. 1, 1903	
Tenney, George A. Treas. Monadnock Mills, Claremont, N. H.	Ac. Sept. 29, 1911	
Textile Development Co., The Sidney S. Paine, Pres., Boston, Mass.	Sus. May 1, 1925	
Thatcher, Albert G. Chairman of Board, Standard-Coosa-Thatcher Co., Philadelphia, Pa.	Ac. Apr. 27, 1916	
Thayer, Gay D. 15 Irving St., Worcester, Mass.	As. Apr. 25, 1907	
Thayer, Nathaniel N. Barry, Thayer & Co., 30 Kilby St., Boston, Mass.	As. Apr. 13, 1911	
Thomas, Isaac R. Mgr. George H. McFadden & Bro., Boston, Mass.	S.R. Oct. 29, 1918	
Thomas, Norman T. Agent, Utica Steam & Mohawk Valley Cotton Mills, Utica, N. Y.	Ac. Oct. 16, 1919	
Thompson, Albert W. Parks-Cramer Co., 1102 Old South Bldg., Boston, Mass.	Ac. Apr. 30, 1909	
Thompson, Gilbert T. Treas. Berkshire Cotton Mfg. Co., Adams, Mass.	Ac. Apr. 30, 1914	
Thompson, Henry B. Pres. U. S. Finishing Co., 320 Broadway, New York City.	Ac. May 3, 1918	
Thompson, James O., Jr. Agt. New Bedford Cotton Mills Corp., New Bedford, Mass.	Ac. Oct. 18, 1900	
Thompson, Philip E. 44 Maple St., New Bedford, Mass.	Ac. Feb. 5, 1926	
Thomson, Charles R. Supt. Solway Dyeing & Textile Co., 41 Lyon St., Pawtucket, R. I.	Ac. Apr. 27, 1905	
Thomson, James Asst. Treas. Dwight Mfg. Co., 53 State St., Boston, Mass.	Ac. Apr. 25, 1907	
Thoron, Ward Treas. Merrimack Mfg. Co., P. O. Box 5209, Boston, Mass.	Ac. May 4, 1920	
Tift, Emerson B. Asst. Supt. Harmony Mills, 81 Vliet St., Cohoes, N. Y.	Ac. Mar. 7, 1924	
Tilton, Newell W. Harding, Tilton & Co., New York City.	S.R. Dec. 17, 1917	
Tobin, John E. Supt. Queen City Cotton Co., Burlington, Vt.	Ac. June 4, 1919	
Todd, W. O. Pres. & Treas. Pocasset Worsted Co., Inc., Thornton, R. I.	Ac. Oct. 18, 1900	
Totokett Mfg. Co. Calvin H. Frisbie, Pres., Versailles, Conn.	Sus. July 20, 1918	
Tourtellot, Carl T. Agt. Renfrew Mfg. Co., Adams, Mass.	Ac. Oct. 29, 1918	
Towne, George W. 62 Salem St., North Andover, Mass.	Ac. Oct. 26, 1892	
Troy Cotton & Woolen Manufactory J. Edward Newton, Treas., Fall River, Mass.	Sus. Sept. 10, 1918	

		Elected
Tuck, Parker	Supt. Houston Textile Mills, Houston, Tex.	Ac. Feb. 2, 1923
Tucker, Philip M.	Pres. Philip M. Tucker Co., 201 Devonshire St., Boston, Mass.	Ac. Apr. 25, 1912
Tuley, Philip S.	Pres. Louisville Cotton Mills Co., 1318 McHenry St., Louisville, Ky.	Ac. Oct. 18, 1900
Tunstall, Harry	12 Maple Ave., Fairhaven, Mass.	Ac. Sept. 21, 1905
Turner, Chas. A.	Pres. Chester Lace Mills, Chester, Pa.	Ac. Mar. 7, 1924
Twiss, William D.	Agt. Everett Mills, Lawrence, Mass.	Ac. Apr. 29, 1896
Underdown, Walter H.	Treas. New Bedford Cotton Mills Corp., New Bedford, Mass.	Ac. Sept. 23, 1909
Underwood, Chas. S.	Hunter Mfg. & Comm. Co., 58 Worth St., New York City.	Ac. Jan. 11, 1924
United Piece Dye Wks.	Albert Blum, Treas., Lodi, N. J.	Sus. Feb. 12, 1918
Vaughan, Wanton	Gen. Mgr. Paco Mfg. Co., 251 Causeway St., Boston, Mass.	Ac. Feb. 5, 1926
Vermilye, Wm. M.	930 Madison Ave., Plainfield, N. J.	Ac. Oct. 5, 1923
Vickery, Robert G.	Cabot Mfg. Co., 77 Franklin St., Boston, Mass.	Ac. June 1, 1923
Wade Publishing Co., The	Frederick L. Babcock, Editor, Cambridge, Mass.	Sus. Apr. 6, 1922
Wadleigh, Jude C.	Agt. Merrimack Mfg. Co., Lowell, Mass.	Ac. Oct. 26, 1892
Wagg, Frederick E.	Agt. Hill Mfg. Co., 487 Main St., Lewiston, Me.	{ Mar. 2, 1922 L. Mar. 2, 1922
Walcott, Charles	Treas. Hill Mfg. Co., Lewiston, Me.	S.R. June 15, 1923
Walen, E. Dean	Asst. to Agt. Pacific Mills, Lawrence, Mass.	Ac. May 3, 1921
Walker, Edward P.	E. P. Walker & Co., 60 Beaver St., New York City.	As. Apr. 29, 1915
Walker, Frank A.	Leary & Walker, New Bedford, Mass.	As. Apr. 16, 1926
Walker, Thomas H.	Asst. Treas. Lorraine Mfg. Co., Pawtucket, R. I.	Ac. Apr. 24, 1923
Wallace, Robert S.	Treas. Fitchburg Yarn Co., Fitchburg, Mass.	Ac. Apr. 25, 1912
Walmsley, Herbert	G. W. Goodwin & Co., Inc., 27 Pearl St., New York City.	Ac. Sept. 30, 1908
Walsh, Frederick T.	12 Valentine St., West Newton, Mass.	Ac. Apr. 28, 1897
Walsh, James J.	S. D. Bush & Co., 153 Milk St., Boston, Mass.	As. June 1, 1923

		Elected
Wampanoag Mills	Sus.	Dec. 7, 1917
Albion C. Cook, Treas., Fall River, Mass.		
Wamsutta Mills	Sus.	Sept. 10, 1917
C. F. Broughton, Treas., New Bedford, Mass.		
Ward, Benjamin I.	Ac.	Sept. 30, 1908
Pres. Bellman Brook Bleachery Co., Fairview, N. J.		
Warren, Edward A.	As.	Oct. 30, 1917
Hotel Kempton, 237 Berkeley St., Boston, Mass.		
Warren Mfg. Co.	Sus.	July 29, 1918
Wm. S. Pepperell, Treas., Warren, R. I.		
Waterman, Frank E.	Ac.	Jan. 30, 1925
Asst. Treas. Butler Mill, New Bedford, Mass.		
Warwick Mills	Sus.	Jan. 29, 1919
Charles O. Richardson, Treas., Centreville, R. I.		
Watson, Clifton E.	As.	Feb. 2, 1923
Mgr. The J. H. Williams Co., Millbury, Mass.		
Wattles, Fred E.	Ac.	Oct. 5, 1899
Asst. Supt. New Hampshire Spinning Mills, Penacook, N. H.		
Watts, Ridley	Ac.	Apr. 25, 1907
Ridley Watts & Co., 44 Leonard St., New York City.		
Watts, Ridley & Co.	Sus.	Nov. 1, 1918
Ridley Watts, New York City.		
Wauregan Co., The	Sus.	Sept. 10, 1918
W. Irving Bullard, Wauregan, Conn.		
Waypoysset Mfg. Co.	Sus.	Jan. 28, 1919
Harold C. Barnefield, Treas., Central Falls, R. I.		
Webb, Andrew S.	S.R.	Aug. 3, 1921
Treas. Charles J. Webb Sons Co., Philadelphia, Pa.		
Webb, Charles J. Sons Co.	Sus.	Aug. 3, 1921
Andrew S. Webb, Treas., Philadelphia, Pa.		
Webster, Joseph W.	Ac.	Apr. 28, 1910
Treas. Grinnell Mfg. Corp., New Bedford, Mass.		
Wellington, Sears & Co.	Sus.	Nov. 13, 1924
Harry L. Bailey, Boston, Mass.		
Welton, A. Roy	As.	May 1, 1924
140 Woodland St., Lawrence, Mass.		
Wentworth, Philip C.	As.	May 3, 1921
Treas., National Ring Traveler Co., 257 West Exchange St., Providence, R. I.		
West, Alexander S.	{ L.	Apr. 17, 1908
U. S. Gutta Percha Paint Co., 12 Dudley St., Providence, R. I.		Apr. 17, 1915
West, William R.	Ac.	Sept. 22, 1896
1886 Purchase St., New Bedford, Mass.		
Westerly Textile Co., The	Sus.	Apr. 16, 1926
Wells R. Fowler, Westerly, R. I.		
Whidden, William B.	As.	Nov. 23, 1925
Sales Repres. American Cellulose & Chemical Co., 24 Milk St., Boston, Mass.		
Whipple, Walter	Ac.	Sept. 13, 1906
Agt. Nashua Mfg. Co., Nashua, N. H.		

		Elected
Whitaker, James D.	Ac.	May 1, 1924
Agt. Lola Cotton Mills, 683 Atlantic Ave., Boston, Mass.		
Whitaker, James L.	Ac.	Sept. 21, 1905
William Whitaker & Sons, Olney, Philadelphia, Pa.		
Whitaker, Wharton	{ L.	Mar. 15, 1919
V. P. & Gen. Mgr. William H. Haskell Mfg. Co., Pawtucket, R. I.		Mar. 19, 1920
White, John S.	S.R.	Nov. 1, 1920
Morse Chain Co., 141 Milk St., Boston, Mass.		
White, Nelson D.	Ac.	Sept. 11, 1912
Gen. Mgr. N. D. White & Sons, Winchendon, Mass.		
Whitehead, H. R.	Ac.	July 10, 1925
Agt. Pepperell Mfg. Co., Biddeford, Me.		
Whitehead, James H.	S.R.	May 31, 1917
Treas. Boston Mfg. Co., Boston, Mass.		
Whitin, Arthur F.	Ac.	Apr. 24, 1895
Pres. Saunders Cotton Mills, Whitinsville, Mass.		
Whitin, Henry T.	Ac.	Apr. 25, 1877
Treas. Paul Whitin Mfg. Co., Northbridge, Mass.		
Whitin Machine Wks.	Sus.	Nov. 1, 1918
E. Kent Swift, Treas., Whitinsville, Mass.		
Whitin, Paul, Mfg. Co.	Sus.	Jan. 22, 1918
Henry T. Whitin, Pres., Northbridge, Mass.		
Whitin, Paul	Ac.	Oct. 1, 1903
Treas. Paul Whitin Mfg. Co., Northbridge, Mass.		
Whitin, Richard C.	Ac.	Jan. 11, 1926
Asst. Treas. Paul Whitin Mfg. Co., Northbridge, Mass.		
Whiting, George H.	As.	June 14, 1926
B. H. Dickson & Co., 141 Milk St., Boston, Mass.		
Whitman, Clarence, & Son, Inc.	Sus.	Dec. 18, 1918
C. Morton Whitman, Vice Pres., New York City.		
Whitman, C. Morton	S.R.	Dec. 18, 1918
Vice Pres. Clarence Whitman & Son, Inc., New York City.		
Whitman, Harold C.	Ac.	Apr. 25, 1907
Treas. The Esmond Mills, 21 East 26th St., New York City.		
Whitman, Hendricks H.	Ac.	Apr. 29, 1915
Monomac Spinning Co., 78 Chauncy St., Boston, Mass.		
Whitman, Malcolm D.	As.	Apr. 25, 1912
William Whitman Co., Inc., 25 Madison Ave., New York City.		
Whitman Mills	Sus.	Feb. 8, 1918
Albert G. Mason, Treas., New Bedford, Mass.		
Whitman, William	Ac.	Apr. 25, 1901
Pres. Nonquitt Spinning Co., P. O. Box 100, Essex Station, Boston, Mass.		
Whittaker, John G.	Ac.	Apr. 17, 1908
Mgr. Lincoln Bleachery & Dye Works, Lonsdale, R. I.		
Whittenton Mfg. Co.	Sus.	Jan. 30, 1925
John S. Farlow, Asst. Treas., Taunton, Mass.		
Whittier, Stephen T.	Ac.	Apr. 13, 1911
Hamilton Mfg. Co., 34 Thomas St., New York City.		

		Elected	
Whittier, W. R. B.	Treas. Whittier Mills, Chattahoochee, Ga.	Ac.	Oct. 18, 1900
Wiggin, Frederic S.	Supt. S. Slater & Son, Inc., Webster, Mass.	Ac.	Oct. 29, 1918
Wiley, Jesse S.	Treas. Columbus Mfg. Co., 201 Devonshire St., Boston, Mass.	Ac.	May 5, 1922
Wilkinson, William T.	Asst. Supt. Aldrich Bros. Co., Moosup, Conn.	Ac.	Apr. 16, 1926
Williams, Walter S.	Mount Hope Finishing Co., North Dighton, Mass.	Ac.	Apr. 30, 1909
Wilson, James A.	Pres. & Treas. J. A. Gowdey Reed & Harness Co., P. O. Box 397, Providence, R. I.	As.	June 5, 1925
Winchester, William E.	Vice Pres. Deering, Milliken & Co., Inc., 79 Leonard St., New York City.	Ac.	Apr. 24, 1902
Windle, J. H.	Selling Agt. Fales & Jenks Machine Co., Pawtucket, R. I.	As.	Oct. 5, 1920
Winsor, Robert	Kidder, Peabody & Co., 115 Devonshire St., Boston, Mass.	Ac.	Apr. 28, 1910
Winsper, Samuel F.	Supt. City Manufacturing Corp., New Bedford, Mass.	Ac.	May 3, 1918
Winterbottom, John W.	Supt. Nashua Mfg. Co., Nashua, N. H.	Ac.	Nov. 23, 1925
Witherbee, Rex G.	Utica Steam & Mohawk Valley Cotton Mills, 801 State St., Utica, N. Y.	Ac.	Apr. 26, 1906
Wixon, Walter James	Treas. Sterling Ring Traveler Co., 101 Lindsey St., Fall River, Mass.	As.	Nov. 10, 1922
Wolff, Charles, 3rd	Supt. Canadian-Connecticut Cotton Mills, Ltd., Sherbrooke, P. Q., Canada.	Ac.	June 14, 1926
Wonalcant Co.	James R. Everett, Vice Pres. & Gen. Mgr., Nashua, N. H.	Sus.	Mar. 15, 1918
Wood, John P.	521 North 22d St., Philadelphia, Pa.	Ac.	Apr. 28, 1897
Wood, Theodore	R. J. Caldwell Co., 15 Park Row, New York City.	Ac.	Sept. 11, 1915
Woodbury, W. Sanford	24 High St., Newburyport, Mass.	Ac.	Mar. 2, 1922
Woodman, Cyrus	Attawaugan Co., P. O. Box 497, Norwich, Conn.	Ac.	Apr. 6, 1922
Woolley, Erving Y.	Lee, Higginson & Co., 70 Federal St., Boston, Mass.	As.	Apr. 6, 1923
Woolley, Frank F.	Agt., Coventry Co., Anthony, R. I.	Ac.	Apr. 27, 1905
Worsnop, William	Agt. Cabot Mfg. Co., Brunswick, Me.	Ac.	Nov. 1, 1923
Wylde, Harry	979 Essex St., Lawrence, Mass.	Ac.	Apr. 13, 1911

GENERAL INDEX

YEAR BOOK

	PAGE
Association Officers since Organization	249
Board of Government, 1926	18
Charter	10
Charter, Acts amending	11
Constitution and By-Laws	12
Foreword	9
Membership List, July 1, 1926	252
Recapitulation	298
Preface	9

MANUAL

Abbreviations	177
Absolute Humidity	218 (Chart)
Acknowledgment of Co-operation:	
Statistical Section	22
Technical Section	176
Acreage (see Cotton Acreage).	
Active Cotton Spindle Hours:	
Cotton-growing States	151
New England States	151
United States	151
Active Cotton Spindles (see Spindles).	
Activity of American Cotton Industry	135
Afghanistan, Cotton Production	30
Algeria, Cotton Production	30
"Alternating Current," Definition of	183
American Cotton in 1925	23
American-Egyptian Cotton:	
Acreage	33
Prices	116, 117
Production	33
United States Consumption	82
American Takings of American Cotton	89
"Ampere," Definition of	183
Analysis of Cloth for Tariff Purposes	232
Angola, Cotton Production	30
Approximate Power Requirements for Cotton Machinery	193
Argentina:	
Cotton Mills	158
Cotton Production	30
Artificial Humidification, Limits of	222
Artificial Silk (see Rayon).	
Asia Minor, Cotton Mills	158
Australia, Cotton Production	30
Austria, Cotton Mills	158
Austrian Equivalents, Cotton Yarn Numbers	195
Average Underwear Production	217
Average Yarn Sizes for Knitting Machines	214

Bales:	
Weights of Cotton	29
Ginned per United States Establishment	45
Bearings, Spacing of	188
Beaumé, Conversion Table to	181
Belgian Congo, Cotton Production	30
Belgium, Cotton Mills	158
Belts:	
Double, Horse Power of	191, 192
Single, Horse Power of	190
Width of Double	191, 192
Width of Single	190
Blankets, Standard Size of	243
Blowers	184
Boilers	184
Boll Weevil:	
Area Infested by	53 (Chart)
Dispersion of	53 (Chart)
Loss, Percentage due to	54
Brazil:	
Cotton Exports	79
Cotton Mills	158
Cotton Production	26
Breaking Strength:	
Correction Tables for	236, 237, 238, 239, 240, 241
Fabrics:	
Strip	223
Grab	224
Yarn	228
Breaking Weight of American Warp Yarns	233
British South Africa, Cotton Production	30
Bulgaria, Cotton Production	30
Calculation for Warper Production	208
Canada, Cotton Mills	158
"Candle Power," Definition of	183
Capacity, Standard Units of	184
Card Clothing Data	188
Carry-over of Cotton, World	61, 62
Charts:	
World Cotton Production	25
Dispersion of the Boll Weevil	54
Stocks of Cotton in Consuming Establishments, in Public Storage and at Compresses in the United States	59
United States Consumption and Exports of Cotton and Linters	80
United States Exports and Imports of Cotton Cloth Compared	107
Prices of Gray Cloths, Manchester and New York, 1922-1924	130
Wage Rates Paid for Weaving Print Cloths in Fall River	140
Cotton Looms in Southern and Northern States	148
Absolute Humidity	218
Relative Humidity	219
Cotton Regain	220
Psychrometric Humidity Table for Use with Sling Psychrometer only	221
Specimen Layout for Breaking Strength, Grab Method	225
Specimen Layout for Breaking Strength, Strip Method	226
Relation of Strength and Elasticity to Twist in a 13s Yarn	234
Relation of a 2-Ply 13s Yarn Strength to Single and Ply Twist	235
Size of Hosiery	243
Chile, Cotton Mills	158
China, Cotton Mills	158
Chinese Cotton:	
Production	26
United States Imports	85

	PAGE
Circles, Area Diameter of	178
Circumference of Circles, Advancing by Sths	179
Cloth (also see Cotton Cloth and Cotton Goods):	
Analysis of, for Tariff Purposes	232
Hourly Production of	210, 211, 212, 213
Test Methods	223, 224, 225, 226, 227
Clothing, Card	188
Cold Rolled Shafting, Horse Power transmitted by	189
Colombia:	
Cotton Mills	158
Cotton Production	30
Comparison of English and French Counts of Cotton Yarn	207
Compressors	184
Condition, American Cotton Crop	39, 40, 41
Consumption (see commodity and countries).	
“Continuous Current,” Definition of	183
Contract Sales Note for Staple Gray Goods	244, 245
Conversion Table:	
Cotton Count to Denier	206
Cotton Yarn Numbers	195
Linear Yards to Square Yards	209
Metric	178
Specific Gravity, Twaddle, Beaumé	181
Thermometer Readings	180
Tire Fabrics	239, 240, 241
Co-operation, Acknowledgment of:	
Statistical Section	22
Technical Section	176
Correction Formula for Converting Apparent Breaking Strength	236
Correction Rates, Breaking Strength:	
Airplane wing fabric	236
Belt duck	236
Cheesecloth	236
Heavy duck	236
Osnaburg	236
Sheeting	236
Tire duck	236
Correction Tables:	
Osnaburg, Breaking Strength	238
Sheeting, Breaking Strength	237
Tire Fabric, Breaking Strength	239, 240, 241
Cost of Living	136, 137
Costs (Erection and Equipment):	
Machinery	147
Spinning and Weaving Mill	146
Spinning Mill	144, 146
Weaving Shed	145
Cotton Acreage:	
American-Egyptian	33
Egypt	33
India	31, 57
United States Abandoned	32
United States Harvested	31, 32
United States Planted	32
Cotton Bales, Weights of	29
Cotton By-products:	
Quantity Produced	47
Value Produced	45, 47
Cotton Cloth (also see Cloth and Cotton Goods):	
Analysis for Tariff Purposes	232
British Exports	109
Comparative Gray Cloth Prices, World	130 (Chart), 131
Comparative Prices with other Commodities	118

Cotton Cloth (also see Cloth and Cotton Goods) — <i>Concluded</i>		PAGE
Cotton-growing States Production		96, 97
Japanese Production		161
New England Production		96, 97
Prices, Colored and Bleached		129
Prices, Gray	118, 124, 126, 128, 131	
Prices, Print		128
United States Exports	101, 102, 105, 107 (Chart)	
United States Imports	99, 100, 106, 107, 108 (Chart)	
United States Production		94, 95, 96, 97
World Prices	130 (Chart), 131	
Cotton Consumption:		
Cotton-growing States		83, 84
European	24, 68, 69	
Great Britain	68, 69, 78	
New England States		83, 84
Non-Cotton-growing States		83, 84
United States	23, 24, 65, 80 (Chart), 81, 82, 83, 84	
World	24, 64, 67, 68, 69	
World per Thousand Spindles		67
Cotton Crops (see also Cotton Production and countries):		
Computation of Condition of	38, 39, 40, 41	
Forecasts of American		37
Grades of Recent American		42
Movement into Sight of American		90, 91
Review of American	48, 49, 50, 51, 52	
United States Commercial		43, 44
Cotton Distribution, United States		63
Cotton Exports:		
Brazil		79
Egypt, Alexandria		74
Egypt by Countries		77
Great Britain		78
India		79
United States	23, 80 (Chart), 81, 86, 87	
Cotton Finishing Industry		132
Cotton Goods (also see Cloth and Cotton Cloth):		
Cotton-growing States Production		96, 97
Japanese Production		160, 161
New Bedford Production and Sales of Fine		134
New England Production		96, 97
United States Production	94, 95, 96, 97	
Cotton-growing States:		
Active Cotton Spindle Hours	151, 152	
Active Cotton Spindles	84, 150	
Cotton Consumption		83, 84
Cotton Goods Production		96, 97
Cotton Looms	148 (Chart), 149	
Cotton Spindles in Place	151, 152, 154, 155	
Cotton Yarn Production		96, 97
Cotton Imports:		
Great Britain		78
United States		85
Cotton Industry, Activity of American		65, 135
Cotton, Length of Staple		27, 28
Cotton Machinery:		
Cost of		147
Exports of		143
Power Requirements for		193
Production of		194
Cotton Manufactures (also see Cloth, Cotton Cloth, Cotton Goods, and Cotton Yarn):		
United States Exports	101, 102, 104	
United States Imports	99, 100, 103	

Cotton Manufacturing:	PAGE
Growth in United States	92
Size of Establishments	98
Summary of New England	93
Cotton Mills:	
Costs	144, 145, 146, 147
Japan	158, 159
New England Establishments	93
Size of Establishments	98
Southern States	156
United States Establishments	92
World's	158
Cotton Picking Dates	29
Cotton Planting Dates	29
Cotton Prices	23, 111, 112, 113, 114, 115, 116, 117, 119, 120, 122, 123, 124
Cotton Production:	
American-Egyptian	33
American Forecasts	37
Brazil	26
China	26
Egypt	25 (Chart), 26, 33
India	25 (Chart), 26, 55
Mexico	26
Minor Producing Areas	30
Peru	26
Review of American	48, 49, 50, 51, 52
Russia	26
United States	25 (Chart), 26, 37, 42, 43, 44, 81, 84
World	24, 25 (Chart), 26, 30
Cotton Receipts at Alexandria	75
Cotton Regain	220 (Chart)
Cotton Seed:	
Hulls produced, United States Quantity and Value	47
Oil produced, United States Quantity and Value	47
Production, United States	45, 47
Cotton Spindles (see Spindles).	
Cotton Standards, Grades of	222
Cotton Staple Lengths by Varieties	27, 28
Cotton Stocks:	
Egypt, Alexandria	76
Great Britain	78
United States	58, 59 (Chart), 60, 61, 62, 63, 64, 65
World Cotton Mill	62, 70, 71
Cotton Supply:	
United States	61
World	64
World Visible	66
Cotton Takings:	
American of American	89
World of American	88
Cotton Varieties	27, 28
Cotton Yarn:	
British Exports	110
Comparative Prices with other Commodities	118
Comparison of English and French Counts	207
Cotton-growing States Production	95, 97
Indian Production	162
Japanese Consumption	161
Japanese Production	160
New England Production	95, 97
Prices	118, 121, 122, 123, 125
United States Exports	101, 102
United States Imports	99, 100
United States Production	95, 97

	PAGE
Cotton Yarn Number, Conversion Table	195
Cotton Yield per Acre:	
American Forecasts	37
Egypt	31, 33
India	31, 56
United States	31, 37, 42
Counts:	
Comparison of English and French Cotton Yarns	207
Square Roots of	199
Yarn, Formula for	205
Cyprus:	
Cotton Mills	158
Cotton Production	30
Czecho-Slovakia, Cotton Mills	158
Dahomey, Cotton Production	30
Data:	
Manila Transmission Rope	187
Reference	178
Dates:	
United States Frost	34, 35, 36
World Cotton Planting and Picking	29
Decimal Equivalents of Common Fractions	182
Definitions, Electrical	183
Denier to Cotton Count	206
Denmark, Cotton Mills	158
"Direct Current," Definition of	183
Dispersion of the Boll Weevil	53 (Chart)
Dividends:	
Fall River	141
New Bedford	141
Double Belts, Horse Power of	191, 192
Doubling Twist	199
Draper Table	233
Duck, Standard List of Wide and Sail	242
Dutch East Indies, Cotton Production	30
Ecuador:	
Cotton Mills	158
Cotton Production	30
Egypt:	
Cotton Acreage	31, 33
Cotton Exports (Alexandria)	74
Cotton Exports by Countries	77
Cotton Mills	158
Cotton Production	25 (Chart), 26, 33
Cotton Receipts (Alexandria)	75
Cotton Stocks (Alexandria)	76
Cotton Varieties	31
Cotton Yield per Acre	31, 33
Egyptian Cotton:	
Prices	116, 117
United States Consumption	82
United States Imports	85
United States Stocks	58
World Consumption	68, 69
World Mill Stocks	70, 71
World Spindles on	72, 73
Electrical Definitions	183
Employees in Cotton Mills of the World	158
Engines:	
Gas	184
Oil	184
Reciprocating Steam	184

England (also see Great Britain):	PAGE
Wage Rates in Cotton Mills	138
English:	
Counts, Comparison of French and English	207
Equivalents, Cotton Yarn Numbers	195
Equivalents:	
Decimal, of Common Fractions	182
Weight	179
Eritrea, Cotton Production	30
Estonia, Cotton Mills	158
Europe, Cotton Consumption	24
Exports (see country or commodity).	
Extra Mule Twists	199
Extra Staple Cotton Production, American-Egyptian	33
Fall River:	
Dividends	141
Sales of Print Cloth	133
Wage Rates for Weaving Print Cloth	140 (Chart), 141
Fans	184
Federal Specifications Board Standard Test Methods	223, 224, 225, 226, 227
Filling Twist	199
Fine Cotton Goods Production and Sales, New Bedford	134
Finishing Industry	132
Finland, Cotton Mills	158
Forecasts:	
American Crop	37
American Yield per Acre	37
Foreign Money Values	173
Foreword:	
Statistical	21
Technical	175
Formule, Heat	185
Fractions, Decimal Equivalents of Common	182
France, Cotton Mills	158
French:	
Africa, Cotton Production	30
Counts, Comparison of English and French	207
Equivalents, Cotton Yarn Numbers	195
Indo-China, Cotton Mills	158
Indo-China, Cotton Production	30
Frosts:	
Average Dates in United States	34, 35, 36
Dates of United States Fall Killing	34, 35, 36
Gas:	
Engines	184
Producers	184
Generators:	
Engine-driven	184
Turbine	184
Germany, Cotton Mills	158
Ginneries, United States	45
Ginnings:	
Products	45, 46
United States to Specified Dates	46
Gold Coast, Cotton Production	30
Grades:	
Recent American Cotton Crops	42
Universal Standards for American Upland Cotton	222
Gray Goods (also see Cloth, Cotton Cloth, Cotton Goods):	
Contract Sales Note	244, 245

	PAGE
Great Britain:	
Cotton Cloth Exports	109
Cotton Consumption	78
Cotton Exports	78
Cotton Imports	78
Cotton Mills	158
Cotton Stocks	78
Cotton Yarn Exports	110
Wage Rates in Cotton Mills	138
Greece:	
Cotton Mills	158
Cotton Production	30
Guatemala:	
Cotton Mills	158
Cotton Production	30
Haiti, Cotton Production	30
Heating Formulæ	185
History of the American Cotton Industry, Statistical	168, 169, 170, 171
Holland, Cotton Mills	158
Horse Power:	
Double Belts	191, 192
Single Belts	190
Transmitted by Cold Rolled Shafting	189
Transmitted by Different Sized Ropes	187
Hosiery:	
Sizes, Standard Measurement of	243
United States Exports	101, 102
United States Imports	99, 100
Yarn Twist	199
Hourly Production of Looms	210, 211, 212, 213
Hours of Work, Legal for Women	172
Humidity:	
Absolute	218 (Chart)
Maximum Limits of	222
Psychrometric Table	221 (Chart)
Relative	219 (Chart)
Hungary, Cotton Mills	158
Imports (see country or commodity).	
India:	
Cotton Acreage	31, 57
Cotton Exports	79
Cotton Mills	158
Cotton Production	25 (Chart), 26, 55
Cotton Yarn Production	162
Cotton Yield per Acre	31, 56
Indian Cotton:	
United States Consumption	82
World Consumption	68, 69
Introduction to Technical Section	176
Italian Somaliland, Cotton Production	30
Italy:	
Cotton Mills	158
Cotton Production	30
Ivory Coast, Cotton Production	30
Japan:	
Cotton Looms	158, 159, 161
Cotton Mill Capital	159
Cotton Mill Operatives	158, 160, 161
Cotton Mill Wages	160, 161
Cotton Mills	158, 159

Japan — <i>Concluded</i>	PAGE
Cotton Piece Goods Production	161
Cotton Production	30
Cotton Spindles	72, 73, 158, 159, 160
Cotton Yarn Consumption	161
Cotton Yarn Production	160
Jugoslavia:	
Cotton Mills	158
Cotton Production	30
Kenya, Cotton Production	30
“Kilowatt,” Definition of	183
Knitting Machines:	
Average Yarn Sizes for	214
Latch Needle Gauge of	216
Needles Per Inch of	216
Number of Slots in Cylinders of	215
Plain Machines	214
Production of	216
Rib Machines	214
Korea, Cotton Production	30
Latch Needle Gauge and Needles Per Inch	216
Latvia, Cotton Mills	158
Laws on Humidity	222
Legal Working Hours for Women	172
Length of Cotton Staple	27, 28
Line Shafts, Diameter of	188
Linear Yards, Converted into Square Yards	209
Linters, United States:	
Consumption	82
Exports	86
Production, Quantity	43, 47
Production, Value	47
Stocks	58
Living, Cost of	136, 137
“Load Factors,” Definition of	183
Locomotives	184
Looms (Cotton):	
Cost	147
Hourly Production of	210, 211, 212, 213
Japanese	158, 159, 161
Northern States	148 (Chart), 149
Southern Cotton Mill	156
Southern States	148 (Chart), 149
Western States	149
World	158
MacColl, William B. (President)	2
Machinery (Cotton Mill):	
Cost	147
Power Requirements for	193
United States Exports	143
Machinery, Pump	184
Malta, Cotton Production	30
Manila Rope, Specification for	186
Manufacturing Margins on Yarns and Cloths	142
Massachusetts Laws on Humidity	222
Maximum Limits of Humidity	222
Metric:	
Conversion Table	178
Equivalents, Cotton Yarn Numbers	195

	PAGE
Mexico:	
Cotton Mills	158
Cotton Production	26
Mill Costs (Erection and Equipment):	
Machinery	147
Spinning and Weaving	146
Spinning	144, 146
Weaving Shed	145
Mitafifi, Prices	116, 117
Moisture per Cubic Foot of Atmosphere	218
Money, Value of Foreign	173
Movement of American Crop into Sight	90, 91
Mozambique, Cotton Production	30
Mule, Twist per Inch	199
Netherlands Equivalents, Cotton Yarn Numbers	195
New Bedford:	
Dividends	141
Fine Cotton Goods Production and Sales	134
Wage Changes	139
New England:	
Active Cotton Spindle Hours	151
Active Cotton Spindles	84, 150
Cotton Consumption	83, 84
Cotton Goods Production	96, 97
Cotton Spindles in Place	151, 152
Summary of Cotton Manufactures Industry	93
Yarn Production	97
New Hebrides, Cotton Production	30
Nigeria, Cotton Production	30
Non-Cotton-growing States:	
Active Cotton Spindle Hours	151
Active Cotton Spindles	84, 150
Cotton Consumption	83, 84
Cotton Looms	148 (Chart), 149
Cotton Spindles in Place	151, 152, 154
Norway, Cotton Mills	158
Number, Formula for Cotton Yarn	205
Number of Slots in Cylinders of Different Cuts	215
Numbering Yarn by Weights	200, 201, 202, 203, 204, 205
Nyasaland, Cotton Production	30
Oceania ("Other Islands"), Cotton Production	30
"Ohm," Definition of	183
Oil Engines	184
Options, New York Cotton Exchange	112, 113
Organizations, Yarn	198
Osnaburg, Breaking Strength of	238
Paraguay, Cotton Production	30
Persia, Cotton Production	30
Peru, Cotton Mills	158
Peruvian Cotton:	
Prices	116, 117
Production	26
United States Consumption	82
United States Imports	85
Philippines, Cotton Mills	158
Picking Dates of Cotton	29
Picks per Inch	210, 211, 212, 213
Picks per Minute	210, 211, 212, 213

Pima Cotton (also see American-Egyptian Cotton):	PAGE
Acreage	33
Prices	116, 117
Production	33
Planting Dates of Cotton	29
Ply Twist	199
Poland, Cotton Mills	158
Portugal, Cotton Mills	158
Power Requirements for Cotton Machinery	193
Prices:	
Cotton	23, 45, 111, 112, 113, 114, 115, 116, 117, 119, 120, 123, 124
Cotton Colored and Bleached Goods	129
Cotton Compared with other Raw Materials	118, 119
Cotton Gray Cloth	124, 130 (Chart), 126, 131
Cotton Print Cloth	128
Cotton Seed	45
Cotton Yarn	121, 122, 123, 125
Egyptian and Pima	116, 117
Extra Staple Cotton	116, 117, 122, 123
Foreign Cotton	114
Relative Wholesale, of Cotton Yarn and Fabrics compared with other Commodities	118
Staple Cotton, New Bedford Basis	122, 123
Staple Cotton Yarns	121, 125
World Cotton Gray Cloth	130 (Chart), 131
Production (also see commodity and countries):	
Average Underwear	217
Cotton Machinery	194
Cotton Rib Underwear	216
Looms, Hourly	210, 211, 212, 213
Roving Frame	195
Spinning Frame	195
Warper Calculation	208
Psychrometric Humidity Table for Use with Sling Psychrometer only	221 (Chart)
Pulley, Diameter of	190, 191, 192
Pump Machinery	184
Range of Production for Cotton Machinery	194
Rayon:	
Prices	166 (Chart), 167
United States Production	164 (Chart), 165
Use of, by Industries	165
World Production	163
Reasonable Allowance for Stops for Knitting Machines	214
Receipts of Cotton at Alexandria	75
Reciprocating Steam Engines	184
Reference Data	178
Regain, Cotton	220 (Chart)
Relation of a 2-Ply 13s Yarn Strength to Single and Ply Twist	235 (Chart)
Relation of Strength and Elasticity to Twist	234 (Chart)
Relative Humidity	219 (Chart)
Review of American Cotton Crops	48, 49, 50, 51, 52
Rope:	
Horse Power transmitted	187
Manila, Specification	186
Sag	187
Roving Frame Production	195
Roving Table	196, 197
Russia:	
Cotton Mills	158
Cotton Production	26
Sag of Manila Rope on Driven and Slack Sides	187

Sales:	PAGE
Print Cloth at Fall River	133
Sales Note, Contract for Staple Gray Goods	244, 245
Sea Island Cotton:	
United States Consumption	82
United States Stocks	58
Shafting, Horse Power transmitted by	189
Shafts, Line, Diameter of	188
Sheeting, Breaking Strength of	237
Siam, Cotton Production	30
Silk, Artificial (see Rayon).	
Silk, Rules for Buying	246
Single Belts, Horse Power of	190
Size of Cotton Manufacturing Establishments	98
Source of Cotton Supply by Staple Lengths	27
Spain, Cotton Mills	158
Specific Gravity, Conversion to	181
Specification for Manila Rope	186
Spindles (Cotton):	
Active Hours, United States	23, 151
Consumption of Cotton per Thousand, World	67
Cotton-growing States, Active	84, 150
Cotton-growing States, in Place	151, 152, 155
Japan	158, 159, 160
New England States, Active	84, 150
New England States, in Place	151, 152, 154
Non-Cotton-growing States, Active	84, 150
Non-Cotton-growing States, in Place	151, 152, 154
Per Cent of Capacity Operation	23
United States, Active	23, 84, 150
United States, by Counties	153
United States, in Place	151, 152, 154, 155
United States, Mule	153
United States, Ring	153
World	72, 73, 157, 158
World, Mule	72, 73
World, on Egyptian Cotton	72, 73
World, Ring	72, 73
World, Spinning	72, 73, 157, 158
World, under Construction	72, 73
Spinners, Cotton Stocks in World:	
American Bales	70, 71
East Indian Bales	70, 71
Egyptian Bales	70, 71
Total Bales	70, 71
Spinning and Weaving Mill, Cost of Erection and Equipment	146
Spinning Frame Production	195
Spinning Mill, Cost of Erection and Equipment	144, 146
Square Root of Yarn Numbers	199
Standard List of Wide and Sail Duck	242
Standard Measurement of Hosiery Sizes	243
Standard Size of Bed Blankets	243
Standard Textile Test Methods	223, 224, 225, 226, 227
Standard Units of Capacity	184
Standards, Grades and Colors of Cotton	222
Staple Gray Goods, Contract Sales Note	244, 245
Statistical History of American Cotton Industry	168, 169, 170, 171
Statistical Section	21-173
Acknowledgment of Co-operation	22
Foreword	21
Steam:	
Engines, Reciprocating	184
Turbines	184

Stocks of Cotton (also see Cotton Stocks, Cotton Supply, and countries):	PAGE
American in World	70, 71
East Indian in World	70, 71
Egyptian in World	70, 71
Total Bales in World	70, 71
Strength of American Warp Yarns	233
Sudan, Cotton Production	30
Sweden, Cotton Mills	158
Switzerland, Cotton Mills	158
Tables:	
Circumference of Circles, Advancing by Sths	179
Conversion of Cotton Yarn Numbers	195
Conversion of Linear Yards to Square Yards	209
Conversion of Osnaburg, Breaking Strength	238
Conversion of Sheeting, Breaking Strength	237
Conversion of Tire Fabric, Breaking Strength	239, 240, 241
Converting Ply Yarn Number to Equivalent Singles	230
Correction Rate, Breaking Strength	236
Dimensions of Breaking Strength Specimens	225
Draper	233
Metric Conversion	178
Psychrometric Humidity	221 (Chart)
Roving	196, 197
Standard List of Wide and Sail Duck	242
Standard Size of Bed Blankets	243
Yarn	200, 201, 202, 203, 204, 205
Tanganyika, Cotton Production	30
Tanguis, Prices	116, 117
Tariff, Analysis of Cloth for	232
Technical Section	175-247
Test Methods, Standard Textile:	
Single Strand Method	228
Strength, Grab Method	224
Strength, Strip Method	223
Strength, Yarn, Skein Method	228
Thread Count	227
Weight	224
Width	227
Yarn Size	229, 230
Yarn Twist	231
Thermometer Readings, Fahrenheit to Centigrade	180
Thread Count of Fabric	227
Tire Fabrics, Breaking Strength of	239, 240, 241
Togoland, Cotton Production	30
Transmission Horse Power of Double Belts	191, 192
Transmission Horse Power of Single Belts	190
Turbines, Steam	184
Turbo-generators	184
Turkey:	
Cotton Mills	158
Cotton Production	30
Twaddle, Conversion Table to	181
Twist, Amount of Ring, Hosiery, Mule and Plied Yarn	199
Twists per Inch	199
Uganda, Cotton Production	30
Underwear:	
Average Production	217
Production of Cotton Rib	216
United States:	
Active Cotton Spindle Hours	151
Active Cotton Spindles	84, 150
American Cotton Consumption	82

United States — <i>Concluded</i>	PAGE
American-Egyptian Cotton Consumption	82
Carry-over of Cotton	61, 62
Chinese Cotton Consumption	82
Cotton Acreage	31, 32
Cotton By-Products Production, Quantity	47
Cotton By-Products Production, Value	45, 47
Cotton Cloth Exports	101, 102, 105, 107 (Chart)
Cotton Cloth Imports	106, 107 (Chart), 108
Cotton Cloth Production	94, 95, 96, 97
Cotton Consumption	24, 65, 80 (Chart), 81, 82, 83, 84
Cotton Consumption, excluding Linters	82
Cotton Consumption, including Linters	82
Cotton Exports	80 (Chart), 81, 86, 87
Cotton Ginned to Specified Dates	46
Cotton Goods Production	94, 95, 96, 97
Cotton Imports	85
Cotton Linters (see Linters, United States).	
Cotton Machinery Exports	143
Cotton Mills, North	158
Cotton Mills, South	156, 158
Cotton Production	25 (Chart), 26, 37, 42, 43, 44, 84
Cotton Spindles in Place	151, 152
Cotton Stocks	58, 59 (Chart), 60, 61, 62, 64
Cotton Yarn Exports	101, 102
Cotton Yarn Imports	99, 100
Cotton Yarn Production	95, 97
Distribution of Cotton	63
Egyptian Cotton Consumption	82
Exports of Cotton Manufactures	101, 102, 104
Foreign Cotton Consumption	82
Ginneries, Active and Idle	45
Growth of Cotton Manufacturing Industry	92
Imports of Cotton Manufactures	99, 100, 103
Indian Cotton Consumption	82
Normal Operation of Cotton Industry	65
Peruvian Cotton Consumption	82
Prices (see Prices).	
Sea Island Cotton Consumption	82
Supply of Cotton	63, 64
Value of Cotton Production	45
Yield of Cotton per Acre	31, 37, 42
Units of Capacity, Standard	184
Value (also see Cotton Manufactures):	
Foreign Money	173
United States Cotton By-Products	45, 47
United States Cotton Production	45
Varieties of Cotton	27, 28
Venezuela:	
Cotton Mills	158
Cotton Production	30
"Volt," Definition of	183
"Voltage," Definition of	183
Wages (Cotton Mill):	
Fall River	140 (Chart), 141
Japan	160, 161
Lancashire	138
New Bedford	139
Warp Yarns:	
Strength of	233
Twist per Inch	199
Warper Production Calculation	208

	PAGE
Water:	
Weight of	178
Wheels	184
"Watt," Definition of	183
Weather, United States Frost Data	34, 35, 36
Weaving Shed, Cost of Erection and Equipment	145
Weight:	
Equivalents	179
Fabric	224
Water	178
Yarn	200, 201, 202, 203, 204, 205
Weights of Cotton Bales	29
Western States, Looms	149
West Indies, Cotton Production	30
Width of Fabric	227
Women, Legal Hours of Work	172
World:	
Carry-over of all Kinds of Cotton	62
Carry-over of American Cotton	61, 62
Cotton Consumption	24, 64, 67, 68, 69
Cotton Consumption per Thousand Spindles	67
Cotton Gray Cloth Prices	130 (Chart), 131
Cotton Mill Stocks	70, 71
Cotton Production	24, 25 (Chart), 26, 27, 30
Cotton Spindles	72, 73, 157, 158
Cotton Spindles on Egyptian Cotton	72, 73
Cotton Spindles under Construction	72, 73
Supply of American Cotton	64, 66
Takings of American Cotton	88
Visible Supply of Cotton	66
Yards of Cloth per Loom per Hour	210, 211, 212, 213
Yarn (also see Cotton Yarn):	
Elasticity of	234 (Chart)
Number, Formula for	205
Numbers	200, 201, 202, 203, 204, 205
Numbers, Comparison of	207
Numbers, Conversion Table of	195
Numbers, Square Root of	199
Organizations	198
Ply	199
Strength of	233, 234 (Chart), 235 (Chart)
Table	200, 201, 202, 203, 204, 205
Test Methods	228, 229, 230, 231
Twist	199
Twists per Inch	199
Yield of Cotton per Acre:	
American Forecasts	37
Egypt	31, 33
India	31, 56
United States	31, 37, 42

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